

# BUSINESS WEEK

YEAR  
AGO  
←  
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Reconversion picture: Auto men, George Romney (left) and Alvan Macauley, give WPB's Krug the Detroit slant

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GEN. LINT  
AND AMBER NICH



# How to make more money . . .

**Y**OU make tires; I raise chickens. I trade 8 of my chickens for one of your tires.

You want to make more money. If you demand 10 chickens per tire, I'll get along without the tire, eat the chickens myself and you'll be out of a job.

But suppose you increased your efficiency and turned out extra tires per day. You can trade them for more chickens and so live better. I raise more chickens to supply the demand, and can now afford tires on my farm wagon as well as my car.

Both of us have increased our standards of living, both are more secure in our jobs, because we increased our production—we added more to the world's goods, and shared in the increase.

Prosperity and security *are* that simple. Thousands of people have tried to becloud prosperity and security by making them seem very mysterious. Hitler, for instance, said only Government

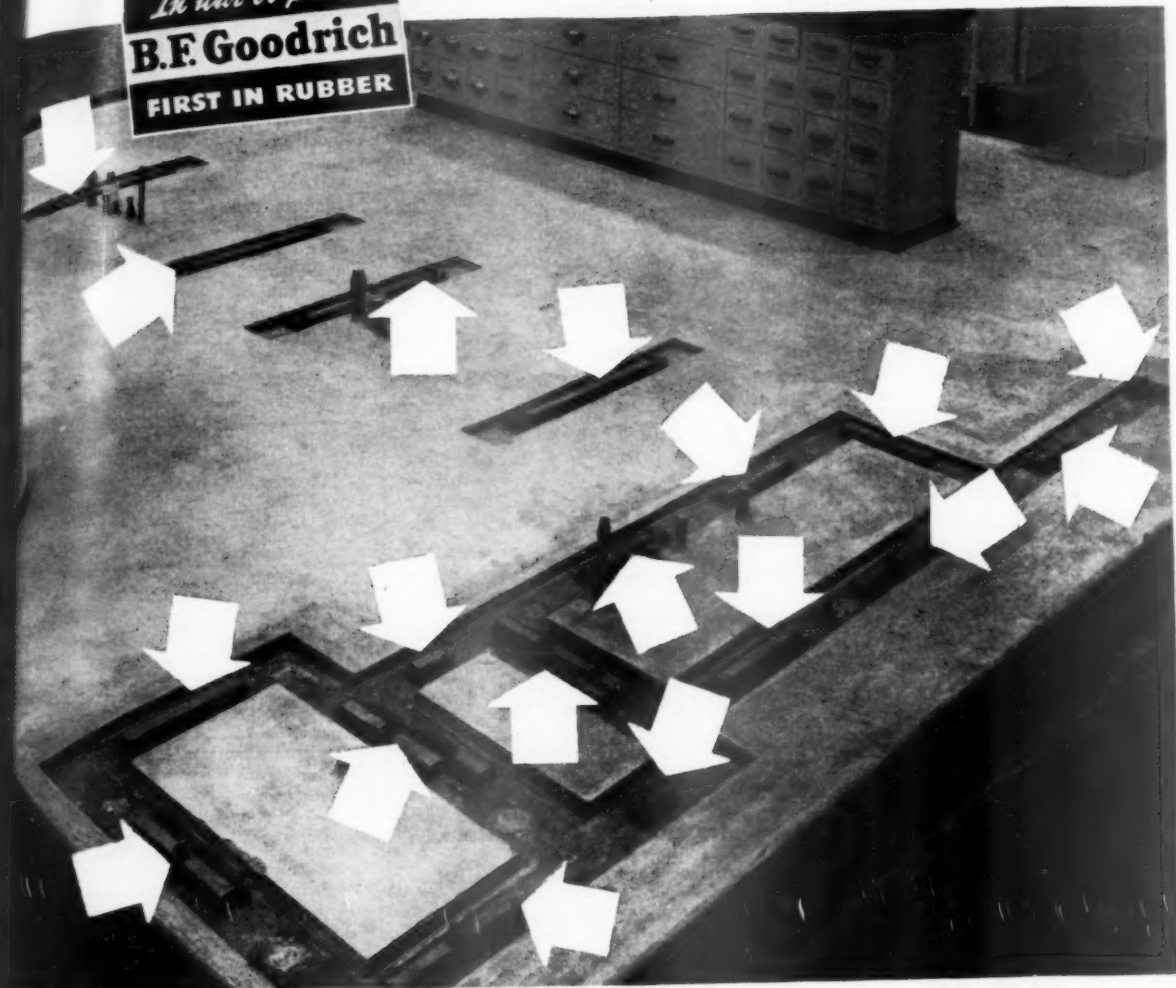
could understand prosperity and security well enough to bring them to the people. Take a look at the tire makers and chicken raisers—and Government planners—in Germany today!



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&  
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even heavy industrial machines as if they are hanging or floating on rubber. In factories they keep vibration from passing through floors and walls; and with vibration gone most noise goes too. Hundreds of thousands of them are in use right now in delicate electronic devices to prevent vibration from getting inside and causing harm.

The big press was mounted on a number of these B. F. Goodrich Vibro-insulators. (You can see them in the picture taken before the press was installed.) It has been operating for months and the other tenants

have yet to hear their first sound, yet to feel their first shiver.

B. F. Goodrich Vibro-insulators are conquering noise and destructive vibration in almost every place that vibration needs to be stopped. Vibro-insulators are another example of B. F. Goodrich research which is constantly improving both rubber and its applications, to make better and longer-lasting rubber goods for industry. *The B. F. Goodrich Company, Industrial Products Division, Akron, Ohio.*

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## PARING FOR A FIGHT

Labor trouble may upset the carefully laid plans to swing the automobile industry back into civilian production as soon as WPB gives the signal. At the same time that production is getting the mechanical details in reconversion smoothed out (p. 15), management and labor are going off for what looks like a head-down-and-drag-out fight. The immediate issue this time is the National Labor Relations Board's recent decision giving unions of auto workers full bargaining protection under the Wagner act (BW-Mar. 15, p. 15). Industry spokesmen denounce organization of foremen as an attempt by labor to assume management's functions without taking on any responsibility. C. E. Wilson, president of General Motors, announced last week that the industry would fight it to the last gasp (page 17).

## Situation Is Explosive

Behind the issue of the moment lies the whole question of how much of wartime gains labor is going to carry into the postwar period. If unionization of foremen doesn't touch off the pressure for higher wage rates to compensate for decreasing overtime, or efforts to maintain union parity, probably will. The automobile industry won't be the only one that faces labor trouble in the midst of reconversion. Resumption of civilian production will raise production issues—downgrading work, laying off shifts, cutting out overtime. These are bound to come up in one way or another.

## PRICE PROGRAM READY

OPA is anxious to follow through on James F. Byrnes' reconversion report (W-Apr. 7 '45, p. 19) with public announcement of a specific program for handling pricing of reconversion goods. OPA now has such a program in its back drawer (it may be modified as reconversion rolls along, but it's good enough for a starter), and some price officials felt that OPA, like WPB, should have had an announcement timed to coincide with the Byrnes' report. No announcement can be made, however, until the program has cleared through William H. Davis, new Director of Economic Stabilization. It will probably also have to clear through Fred

M. Vinson, the new Director of War Mobilization.

Meantime, OPA is again meeting with industry advisory groups to discuss specific problems of reconversion pricing. Such a meeting was held this week with auto dealers. OPA is hoping dealers will be able to absorb any price increase granted manufacturers—if one is forthcoming.

## PORTAL-TO-PORTAL PLUS

By reaching an agreement without National War Labor Board assistance, coal miners and operators have put NWLB and William H. Davis, former board chairman and new Director of Economic Stabilization, squarely on the spot.

Of one year's duration retroactive to Apr. 1, the new contract will raise the average daily wage by \$1.30, according to the operators. The agreement may be reopened after Mar. 1, 1946, on ten days' notice by either party, or before that time if there is a significant change in wage stabilization policy.

## 1945 Vacations Eliminated

The agreement provides a basic nine-hour working day, portal-to-portal, for all inside day workers. It includes a paid 15-min. lunch period, staggered so that there will be no interruption to continuous production.

Vacation pay is to be increased from \$50 to \$75 annually. The vacation for 1945 is eliminated in the interests

of the war effort and the money is to be paid to the miners before the last payday in June.

The contract stipulates that "no strike shall be called or maintained."

## Overtime May Trouble NWLB

Shift differentials and increased vacations can be approved under the new fringe wage policy without any ado. The trouble will come when the board tries to reconcile the new contract's provision for overtime after seven hours, including portal-to-portal, with NWLB's careful justification of portal-to-portal pay late in 1943 as an obligation accruing under the 40-hour law. Two years ago, John L. Lewis abandoned his traditional seven-hour day (excluding travel time) to get recognition of the portal-to-portal pay principle. Under the new agreement he gets back the seven-hour day—with pay for all travel time tossed in.

Davis, this time as economic stabilizer, will get a chance to recall the opinions he wrote as NWLB chairman when he reviews the increased price award OPA is expected to make if the new wage agreement clears NWLB.

## BRAZIL OFFERS TO PAY

On the day Sen. Millard Tydings delivered his sizzling denunciation of Uncle Sam's "blank check" policy and the Senate renewed the lend-lease act for another year, Brazil quietly prepared to lay \$35,000,000 in cold hard cash on the Treasury doorstep in part payment of U. S. lend-lease transfers.

Even those who merely shrugged at the cost of lend-lease good neighborliness when it hit \$207,000,000 at the end of 1944 were startled. Hardened critics of U. S. extravagance in Latin America have not yet recovered from the shock.

Brazil's lend-lease bill runs to more than \$100,000,000, and the \$35,000,000 represents three annual instalments due in January 1943, 1944, and 1945. At this rate the balance could be liquidated in another six years.

The big question now is how much more of lend-lease spending is likely to come bouncing back to U. S. coffers?

## FOOD PROBE PAYS OFF

The Senate committee investigating the food crisis (with specific attention to meat) is making all the headlines,

Paper is a No. 1 war material shortage, because over 700,000 different war items are wrapped, packaged, labeled, tagged, or made from paper or container board. And the Pacific war, when it speeds up, will require stupendous amounts of paper and board since double and triple packing are required for protection against weather and insects.

So please—

- (1) Share this magazine. The number of copies that can be printed is limited, due to the paper shortage.
- (2) Then put this magazine into paper salvage.
- (3) And look over your store room to get wastepaper of any kind for paper salvage.

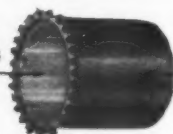
Then you'll be doing an "extra" to aid the war effort and speed victory.



## A Longer Life . . . Born of AL-FIN

Longer life for the machines of men emerged from Fairchild research laboratories when Al-Fin—the tie that binds aluminum to steel—was developed and perfected. Four years ago, Fairchild researchers successfully “backed up” the qualities of light aluminum with the strength of heavy steel. For more than two years Al-Fin has stood the exacting tests of the aircraft industry in aircooled engines. But customary vision of the Fairchild organization has seen Al-Fin’s unusual possibilities in many other fields. Today, Al-Fin lines steel bearings with aluminum alloy for use in many modern transportation engines. Under test, these Al-Fin bearings have lasted more than twice as long as other bearings similarly tested. They have demonstrated better wearing qualities, lower frictional losses. Because bearings are the wearing parts of machines, the Al-Fin process establishes greater efficiency, longer life—better service for the machines that work for men.

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The House committee is doing all that Executive agencies are genuinely impressed by the way this committee has gone about the job of accumulating information and suggesting legislation.

Results can already be seen in War Administration's announcement that farmers will be asked to produce 10,000 pigs this fall—18% more than last year. Simultaneously, WFA has set the support price on hogs at \$12.50 to \$13 a cwt. And the Office of Price Administration announced that ceiling prices on live hogs will continue at the present level at least until Sept. 1.

OPA is getting ready to put into effect its program for limiting slaughter on the farm and in nonfederally inspected packing houses. This should result in more meat to federally inspected plants who must supply both the mili-

tary and the big metropolitan areas whose meat is shipped across state lines (BW—Mar. 31 '45, p17).

Another move in this direction would be temporarily to certify local slaughterers in states with good inspection systems, permit them to ship across state lines. Under pressure, the military may be forced to buy from such sources. These suggestions, however, meet bitter opposition from officials who have spent years trying to build up the present system of federal inspection.

## PRICE BILL FACES DELAY

Inflammatory testimony in Senate hearings on the meat shortage is jeopardizing prospects for early reenactment of an unamended price control bill.

In the House, where leaders have been waiting for Senate action before taking up the price act, Republicans have demanded that the House committee investigating the food shortage make a preliminary report by May 1, so that its findings will be available before price control legislation comes to a vote.

Along with the meat situation, OPA's announced intention of introducing an "escalator" plan into the pricing of cotton textiles has contributed to difficulty of a Senate banking subcommittee in formulating its report on the continuing legislation. After meeting the requirements of the Bankhead amendment that all major cotton textile items be priced to reflect parity for raw cotton, OPA now intends to peg ceilings to the prices actually paid by mills.

To forestall this, some members of

## Sales Manager for the Wallace Dept.

There's no doubt about it. Secretary of Commerce Henry Wallace has picked a businessman—a salesman—as his under secretary.

Reports that Alfred Schindler, former sales manager of the Ralston Purina Co., St. Louis, had been selected for this key post in Wallace's shop—which is under close scrutiny by big and small businessmen alike—preceded his nomination by ten days. That was orthodox in Washington.

Less orthodox was the business source of the Washington correspondents' briefing on their new Commerce Dept. news contact.

• **Advance Billing**—Heralding the appointment, the Anfenger Advertising Agency of St. Louis told them that, "Business and industry should be encouraged at the news that Alfred Schindler of St. Louis has been nominated. He embodies in his experience an unusual combination of a successful business background and a first-hand knowledge of Washington wartime activity."

"In addition to outstanding physical and mental vigor, he is one of the most forceful platform men in America today. [Schindler's friends in Washington say that's not the half of it.] After developing a course of action he has a follow-up system which has been humorously described



as 'inevitable as death or taxes.' As one of his salesmen expressed it—'Al Schindler can stand on a platform and stir me to sincerely promise him the greatest job of my life. Next morning I know it's impossible, but he'll never let me admit it. And before he gets through, I've done the impossible.'"

• **War Plant Expert**—Schindler worked for former Secretary of Commerce Jesse Jones from January, 1942, to May, 1943. It is hardly a coincidence that Wallace, to whom

the Senate refused the job as Federal Loan Administrator, should enlist the services of a man who was an official of the Defense Plant Corp. and who directed the activities of a field staff that had the responsibility of expediting the completion of government-financed war production plants.

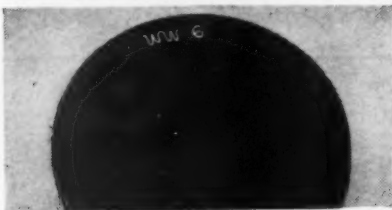
Schindler's thorough knowledge of this large increment to the country's industrial capacity may be expected to aid Wallace materially in his cherished plans to utilize it in the postwar promotion of small business enterprises, even though the secretary has to pursue those plans outside rather than inside the loan agency.

• **Objectives**—Concerning his nomination, Schindler himself said: "I shall do all in my power to assist business and industry in achieving its goal of postwar economic activity with maximum profitable production and maximum gainful employment for all American workers, including the millions of our veterans whom we all pray will soon be returned to their homes to enjoy the rights and freedoms which they have so gallantly defended."

Some of the experience that he will apply to this job has been gained as executive director for the Committee for Economic Development in St. Louis.



## WILLSON-WELD LENS FEATURES



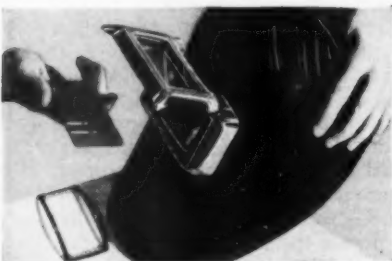
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the committee—notably Sen. John Bankhead, who fathered the amendment—would use the committee report to condemn this proposal, figuring that such a condemnation would be enough to discourage OPA from taking such action.

## SHARING THE CUTBACKS

WPB has taken steps to keep war production cutbacks in the U. S. and Canada in line—a policy that leaked some weeks ago when Canada's Munitions Minister C. D. Howe hinted that V-E Day cuts would be about 35% in Canada, the U. S., and the United Kingdom.

A double-barreled reason is given in WPB chief J. A. Krug's memorandum to his staff for coordinating cutbacks of U. S. contracts in Canada and at home:

(1) Since Canada's war output is more than 70% for U. S. and British account, drastic cancellations after V-E Day would stagger the Canadian economy.

(2) Such a policy would force Canada to jump into civilian output for home and export, making for loud squawks from U. S. producers.

## G. I. LOAN PLAN FLOPS

The Veterans Administration now is conceding that the veterans' loan program (BW—Nov. 4'44, p66) in the G. I. Bill of Rights has fizzled. It is drafting a series of liberalizing amendments for submission to Congress.

Bankers and other lenders will recall how, months ago, their warnings that the G. I. loan formula was unworkable were countered by the confident prediction from Veterans Administration officials that by the end of this fiscal year (June 30, 1945) loans for 225,000 veterans would already have been approved.

With this deadline only eleven weeks away, the agency has authorized only 1,608 loans—three for farms, 23 for business ventures, and 1,582 for homes. On this practically negligible effort, processing costs have exceeded 4%.

—Business Week's  
Washington Bureau

## THE COVER

In Detroit, the reconversion ball is rolling. Last week, while WPB Chairman J. A. Krug was on the scene to get a first-hand view of the problem, automobile men outlined their material and labor needs to travel the road back to civilian production (page 15).

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*looks good to me!*



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*P.S. The boss says*



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# THE OUTLOOK

BUSINESS WEEK

APRIL 14, 1945



The air is full of talk about reconversion and cutbacks, but it is well to bear in mind the fact that output for civilians right now is at the low point of the entire war.

This is only the eve of reconversion. Next comes the painful period of bottlenecks, then finally the real step-up in consumer goods.

But the autos won't be in the show windows for a long time.

Most hopeful sign on the home front is that the War Production Board is trying to remove reconversion road-blocks before industry reaches them.

This is demonstrated convincingly in its approach to the Detroit problem (page 15). Washington wants no stagnation in the motor city for two very good reasons:

- (1) The country badly needs new passenger cars.
- (2) The motor industry will be a major factor in employment.

Yet the manufacturers of autos have to reconvert more completely, from one end of the assembly line to the other, than any American industry. Theirs are problems that need all possible study and ingenuity.

While everyone is wishing the auto companies success, Wall Street is saying it with dollars.

Five of the ten most active stocks on the New York Stock Exchange Tuesday were motors—four of them the so-called independents. Hudson got the biggest play and recorded the largest price rise, \$2 a share.

Investors are banking on the industry's record for getting things done. There is a lush market for the company that turns out the first cars—and plenty of sales for everybody for at least three years.

Present thinking on "relocation" of war orders has in it most of the elements of the reconversion program sponsored by Henry J. Kaiser last autumn (BW—Oct.28'44,p10).

Basis for relocation is that some war contractors are willing to continue on war work after cutbacks. They will take over jobs from, say, the auto manufacturers. In some instances, they probably can help clear floors for civilian output by taking over tools as well as jobs.

Meanwhile, motor car manufacturers and some other hard-goods lines are doing the same type of things by shifts within their own plants.

Cutbacks that will free plant capacity so far are few and far between. Most announcements mean only that certain phases of various programs will not be started.

This was true of the 72-ship cut in the Navy's program last month (BW—Mar.31'45,p9); these ships were to have been built, but keels weren't laid.

It also is true of two announcements this week—abandonment of twelve tank factories and a \$200,000,000 reduction in the Army's artillery ammunition demand. The tank plants hadn't been equipped, work on the ammunition hadn't been started, and some of the facilities hadn't been completed.

There are some real reductions, however. Rifle and machine gun cartridges and merchant ships are outstanding examples.

Some machine-tool orders have been canceled as the result of the stop-orders

# THE OUTLOOK (Continued)

**BUSINESS WEEK**

**APRIL 14, 1945**

on tank arsenals and artillery ammunition facilities. Others will be wiped out soon after V-E Day. Yet toolbuilders can't see daylight (chart, page 17).

High-priority Russian business comes ahead of civilian orders now on their books even if all contracts for the armed services were cut off. As a matter of fact, it would take about 2½ months at the present rate of output to clear the Russian business.

**However, WPB on Wednesday showed where it stood, approving reconversion tools for the auto industry. Supply situations are changing for the better but it's a matter of degree. There still isn't enough of anything, but pinches aren't so tight.**

Important metals provide good examples. Steel orders have tapered off, but order books are clogged months into the future.

Zinc shipments to consuming industries in March smashed all records at 94,494 tons, and the first quarter's total came to 269,802 against 210,699 in the same 1944 period. Copper also set a new high in March.

But demand for copper and zinc is due to decline. The cutback in the small-arms ammunition program affects a dozen brass mills. The trade, quick to look on the gloomy side, insists that copper will be hunting for customers by the end of June.

However, demand for copper wire seems insatiable, and shipbuilding still will take huge quantities even after V-E Day. Then, too, hardware and construction demand will be felt in no time after Germany's fall.

•  
Latest tightening of controls—and most surprising—covers tungsten.

All demand for cutting tools had been met and to spare. But that reckoned without jet propulsion and gas turbines. Steels to stand the extreme heat of these power plants require the finest alloying materials.

•  
The metal trade can see no evidence that manufacturers are making any effort to pull their inventories down.

Last autumn, such a tendency was decidedly evident. Then came the sudden upsurge in war orders, and buying of raw materials mounted apace. Maybe war contractors are afraid to dip into inventories this time.

**But surpluses won't be as big as you might think. Army and Navy haven't yet told how much rebuilding their stockpiles will need.**

Recent demand for metals has cut very deeply into these strategic reserves.

•  
Important as hard-goods manufacturing as a source of reconversion employment (and perhaps more so) is construction, particularly residential.

WPB is having its troubles trying to figure how to push building.

Airports, highways, road repair: Yes. There's plenty of cement. Also, home repairs and replacement of heating equipment and plumbing can be aided. Masonry and asphalt roofing supplies will prove adequate.

**But lumber is the high hurdle. Inventories are down 70% in three years and demand continues to exceed supply. Nobody expects to get enough manpower into the woods and sawmills anytime soon after V-E Day. On top of everything else, the sizes that builders would need most are the tightest.**

Screening, structural steel and reinforcing bars, and cast-iron soil pipe are scarce now, but that situation will clear up rapidly.

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Wheat (N  
Sugar (ra  
Cotton (r  
Wool To  
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BUSINESS

# FIGURES OF THE WEEK

THE INDEX (see chart below). . . . .

% Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
*235.3	†235.1	231.3	230.3	238.8

## PRODUCTION

Steel Ingot Operations (% of capacity).....	94.3	96.9	94.5	96.9	98.7
Production of Automobiles and Trucks.....	20,645	20,335	20,235	16,865	18,175
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$6,114	\$5,639	\$5,997	\$5,595	\$5,383
Electric Power Output (million kilowatt-hours).....	4,322	4,329	4,446	4,375	4,361
Crude Oil (daily average, 1,000 bbls.).....	4,784	4,781	4,768	4,692	4,416
Bituminous Coal (daily average, 1,000 tons).....	2,023	†1,975	1,880	2,030	2,094

## TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	87	86	83	88	82
All Other Carloadings (daily average, 1,000 cars).....	52	50	48	64	50
Money in Circulation (Wednesday series, millions).....	\$25,865	\$25,834	\$25,864	\$23,881	\$21,191
Department Store Sales (change from same week of preceding year).....	+8%	†+25%	+19%	+12%	+32%
Business Failures (Dun & Bradstreet, number).....	23	28	21	27	37

## PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	255.6	255.3	255.2	250.0	250.4
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	166.4	166.4	166.4	165.4	163.1
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)...	226.9	†226.4	226.1	225.5	222.5
Finished Steel Composite (Steel, ton).....	\$57.55	\$57.55	\$57.55	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$16.08	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.67	\$1.67	\$1.66	\$1.62	\$1.64
Sugar (raw, delivered New York, lb.).....	3.75¢	3.75¢	3.75¢	3.75¢	3.74¢
Cotton (middling, ten designated markets, lb.).....	21.93¢	21.78¢	21.74¢	21.71¢	21.16¢
Wool Tops (New York, lb.).....	\$1.340	\$1.340	\$1.340	\$1.340	\$1.315
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢

## FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	109.9	108.9	111.0	102.9	95.6
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	3.37%	3.39%	3.38%	3.55%	3.68%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's).....	2.61%	2.60%	2.62%	2.72%	2.74%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate).....	½%	½%	½%	½%	½-¾%

## BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks.....	37,184	37,347	37,149	35,383	32,872
Total Loans and Investments, reporting member banks.....	57,349	57,797	58,424	54,436	51,633
Commercial and Agricultural Loans, reporting member banks.....	6,044	6,088	6,198	6,091	6,215
Securities Loans, reporting member banks.....	2,537	2,698	2,907	2,480	2,193
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks..	43,286	43,565	43,977	40,506	37,961
Other Securities Held, reporting member banks.....	3,071	3,052	2,930	2,931	2,902
Excess Reserves, all member banks (Wednesday series).....	900	900	900	862	859
Total Federal Reserve Credit Outstanding (Wednesday series).....	20,255	20,074	20,150	17,099	12,766

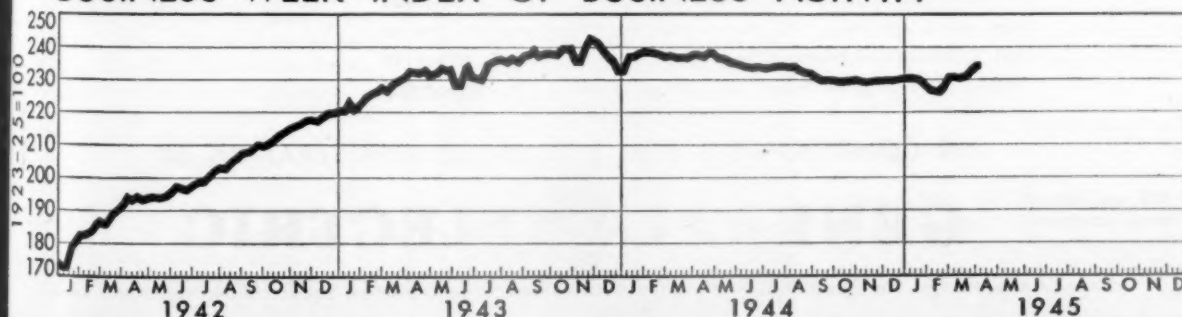
Preliminary, week ended April 7.

† Revised.

‡ Ceiling fixed by government.

§ Date for "Latest Week" on each series on request.

## BUSINESS WEEK INDEX OF BUSINESS ACTIVITY



# WHAT DO THEY HAVE IN COMMON?

ANSWER BELOW

					
AIRCRAFT	MEDICINES	COMMUNICATIONS	TANKS	MOTORS	FOODS
					
GAUGES	CAMERAS	TIRES	MILK	SHIPS	OPTICALS
					
AUTOMOBILES	MUNITIONS	METALS	RECORDS	CHEMICALS	TEXTILES
					
MAPS	OIL	RADIO	X-RAY FILM	MACHINE TOOLS	COPPER
					
PAINT	PLASMA	PLASTICS	GEARS	WATCHES	PARACHUTES

ANSWER: All these products are being made faster, better, at lower cost, or are giving better service—through use of air conditioning or refrigeration. Yes, all these and thousands more! Wherever you can use air conditioning or refrigeration for faster, better, lower cost production, see G-E!

AIR CONDITIONING AND INDUSTRIAL REFRIGERATION BY

**GENERAL  ELECTRIC**

General Electric Co., Air Conditioning and Industrial Refrigeration Divisions, Section 5864, Bloomfield, N. J.

Tune in: The "G-E HOUSE PARTY," every afternoon, Monday through Friday, 4 p. m., EWT, CBS . . . The "G-E ALL-GIRL ORCHESTRA," Sundays, 10 P. M., EWT, NBC.  
"THE WORLD TODAY" News, Monday through Friday, 6:45 P. M., EWT, CBS

BUY and hold  
WAR BONDS



## Detroit Warms Up for Autos

Motor industry, chosen for leading role in march back to civilian manufacture after V-E Day, must rebuild production plant bodily. Washington acts to head off a threat of unemployment.

No sooner had WPB unveiled its five-point blueprint for reconversion this week (BW-Apr.7'45,p15) than the automobile industry got the nomination for first place on the road back to civilian production.

On Tuesday, WPB Chairman J. A. Krug announced the program in Washington. Two days later, he was in Detroit telling the arms capital what to expect when V-E Day speeds the return of its proud title—"Motor Capital of the World."

**V-E Day Plus?**—Resumption of mass production of automobiles is the goal, tentatively set for six months after Germany's collapse. It may take longer than six months; some manufacturers think that it won't require anything like that much time. But there was no room for disagreement in the way the Detroit men grasped hungrily at WPB's assurances. Quickly forgotten were earlier hopes for quick reconversion that had been dashed by the tides of war (BW-Sep.9'44,p20).

The auto industry, which labored painfully for months to achieve conversion to war work (BW-Feb.21'42,p15), naturally became enthusiastic over WPB's quick attention to its equally complex change-over problem.

**Unique Position**—The change-over problem facing auto makers obviously is one that calls for enthusiasm, for, unlike many industries, the auto companies had to tear out their production plant bodily to take on war work. Assembly lines which turned out passenger cars were ripped apart to make way for output of special military vehicles and tanks, aircraft sections, guns, and ammunition. Spark plug makers turned to gunsights. Generator companies began to build radar equipment.

Plants were rearranged. Prewar operations and facilities were scrambled so thoroughly that many of them can never resume their prewar shape. Some 20,000 machine tools were sold or leased to the government and to other contractors needing them.

**Politics Not Forgotten**—To reactivate auto production, therefore, not only is unprecedented, but also is different from the job confronting any other in-

dustry, with the possible exception of electrical appliances. Washington realizes that, and more besides. If the auto plants are not ready to begin peacetime work shortly after big production gaps are left by V-E Day war contract cancellations, unemployment will mushroom in auto and parts centers.

The politics of the situation compel the attention that Washington began to concentrate on it last week.

Quite apart from these considerations is the demand for autos, probably greater than that for any other consumer goods, since half the cars now on the road are now over 7½ years old—and the newest is three years old.

**• Committee Created**—WPB's chief had no sooner arrived in Detroit than he announced creation of a special "task committee" headed by Henry P. Nelson (box, below) to act as liaison agency in the industry's reconversion problems.

Nelson will first take up the problems the auto executives threw at Krug and his major aides last week. Discussions will be on the alternative assumptions that car production can be resumed (1) on a basis of 50% of prewar levels—about 2,000,000 cars, or (2) on

## A Production Man Spearheads Reconversion

Thirty-seven year old Henry P. Nelson is one man the war has made.

From the obscurity of a subexecutive post in the Order & Distribution Dept. of the Tractor Division of International Harvester, he has risen rapidly in the WPB hierarchy, emerges now as the man with chief responsibility for getting the auto assembly lines rolling again in Detroit.

**• A Production Man**—Nelson really knows production, and that's the reason for his quick climb in WPB. It's the reason why he has the right ear

—and part of the left ear too—of "Cap" J. A. Krug, WPB chairman. He went to the capital in the early days of the war on a 90-day leave to help straighten out some materials problems, then moved to the West Coast to help break aircraft bottlenecks.

There he distinguished himself by setting up a disposal program that enabled plants to clear from their books millions of dollars of excess materials. There, too, he won his spurs as the first WPB man able to buck the AAF, thanks to his help in licking a landing gear production problem.

**• Auto Men Pleased**—At Detroit, Nelson will not be a czar but a liaison man, helping the auto companies settle their problems with WPB, Army, Navy, OPA, War Manpower Commission, and surplus disposal agencies. Motor men rightly figure that they have an influential friend at court, and they like the way he started work with Krug in Detroit last week—right on the factory floor of Nash-Kelvinator.

Hero or goat in the weeks ahead, Norwegian-born Nelson at least doesn't have to worry about his own reconversion problem. He's still on the International Harvester payroll, and last fall, when he thought he might get away from Washington, the Harvester people made it clear that they'd be glad to have him back.



an unrestricted basis, at an unspecified date after V-E Day.

Machine tools head the list of problems to be considered by Nelson's committee, followed by plant clearances, manpower, facilities, and materials.

• **Equipment Needed**—On machine tools the job has already begun. The auto people, having obtained some equipment during last summer's temporary relaxation on civilian goods ordering, now need 5,085 more new pieces. WPB's Tools Division is charged with getting them.

The mechanism will be a quasipriority, based on time-importance rather than use-importance. A highly rated military machine tool needed at a later date for end-schedules will give way to a comparatively minor reconversion machine for civilian use, if the military machine can still be delivered on time.

• **A Rush Job**—This entails juggling of every order on the books of some 190 machine-tool makers; a study of this problem, well under way, has been turned into a rush job on Krug's orders following last week's conference. Krug indicated that these civilian orders will not interfere with lend-lease military requirements, but will take precedence over foreign postwar tool purchasing.

This was not wholly what the auto companies wanted, but WPB's announcement this week that production of tools needed for civilian goods would be initiated immediately and that the auto industry would be the first beneficiary to the tune of \$50,000,000 worth went a long way toward allaying concern. Previously one major executive had estimated that a \$10,000,000-a-month output for five months would take care of auto change-over needs.

• **To Transfer Contracts**—On plant clearances, WPB will widen the scope of its new Production Readjustment Committee and will also work closely with the armed services.

Henceforth, the PRC will have a weather eye out for contract windups in nonautomotive plants, where possible contracts held by car makers would be transferred to the idle plant. The effect will be to release auto companies gradually from aircraft commitments.

Beyond that, auto companies will be advised in detail—work started this week—of contract cutbacks planned for them by Army and Navy.

Meanwhile, predetermination of contract settlements (BW—Oct. 28 '44, p. 21), begun last fall at Studebaker, then expanded only to be cut short by changed military policy in December, is now recommending and will be speeded as an accessory to plant clearances.

• **Deferment Policy**—Detroit's chief manpower concern revolved around availability of men for machine-tool and



## NEW LAMPS FOR OLD

Aloft in New York harbor's Statue of Liberty, Samuel Hibben, Westinghouse director of applied lighting, directs installation of new mercury vapor lamps to make the symbolic torch burn bright for V-E Day. News of victory not only will signal the rekindling of the torch—dimmed during the war—but will inaugurate a modernized floodlighting system to bathe the famous "lady" in brilliancy more than double that of prewar days.

tooling output. Men to run assembly lines are expected to be automatically available when the time comes.

Krug's answers on make-ready manpower were quick and satisfying. WPB will urge deferment of skilled men in machine-tool plants.

As for tooling, efforts were to be made through the area Production Urgency Committee to lighten draft pressure on tool and die companies.

• **Facility Program**—The auto people asked Krug to approve auto company plans to spend \$25,000,000 for plant extensions, renovations, and the like, preliminary to reconversion. They were told to expect nothing until V-E Day. But manpower and materials then available will probably speed jobs.

As for materials, Krug made a loose estimate that 1,500,000 tons of steel would be available for civilian production in the first quarter after European victory. Obviously this would permit no more than a trickle to the auto industry against its high requirements (5,000,000 tons a year in a normal year). Lead (needed for batteries) and textiles (for upholstery) will be proportionately much tighter for a time. Tires may present a problem for some time.

Nevertheless, Krug was optimistic over materials in general. He said that the first quarter after V-E Day will see unrated orders filled, and the second will likely find the Controlled Materials Plan supplanted by a system of simple priorities in which military needs will rank first, civilian needs second, the latter handled by material suppliers just as before the war.

• **Easing the Transition**—The sum total of these situations is that an auto go-ahead will likely not come until several weeks, maybe several months after Germany falls, due not only to unavailability of materials until then but also to Washington's desire to make the Pacific war thoroughly.

Meanwhile, prereconversion steps to prepare for that go-ahead will be progressing rapidly in the auto plants which is what the industry sought last week. The way will likely be cleared to the point that transition unemployment will be greatly minimized.

Production workers will swing into make-ready jobs. Machines will be shifted, conveyors reinstalled.

Prewar dies still needed will be dusted off, repaired, and set in position. Pre-1940 tooling was scrapped long ago for metal salvage (BW—Jun. 20 '42, p. 45). New dies, some now on order, will be added to build modified models.

• **Can't Start Together**—Obviously it will be impossible for all plants to get away simultaneously at the starting gun. The broad policy of plant-by-plant reconversion is built on a feeling that idleness cannot be permitted in 90% of an industry simply to aid the unfortunate 10% whose war commitments will impair their returns to normalcy. Krug has made no secret of this.

Handicapped companies will try to offset their problems with new facilities and construction, included in the \$25,000,000 of facilities asked for.

• **How They Stack Up**—Company by company, reconversion prospects and problems are seen about like this by Detroit industry sources:

**General Motors:** Its five car-making divisions are equally hindered by shortages of presses in the Fisher body plants. Unless some change, now unforeseen, occurs, G.M. may be able to produce only one or two models, probably in limited quantity, of each car for some time.

Pontiac is probably in the best position among G.M. units, for it is now making buses on its auto assembly lines. Olds' gun contracts also make a good situation for that maker, in the light of the earlier easing of such requirements. The ability of Buick and Chevrolet to go ahead depends largely on their releases from aircraft contracts, but both believe the calls on them will lighten.

illiac, heavily booked on armored  
icle and plane parts, may lag a bit.  
Ford: The River Rouge works' is in  
eniable position for reconversion,  
ause the topmost Ford contracts are  
separate buildings (the Willow Run  
mber plant is a notable example),  
forced from the bulk of the car-  
ducing facilities. This company may  
it possible to be a leader.

**Chrysler:** Its broad range of tank, ammunition, and aircraft contracts spread through its various plants poses a stiff reversion problem, but many feel it will greatly diminish when war in Europe ends, heightening the likelihood of transfer of the remnants. DeSoto's 1949 contracts may be the hardest change-over barrier in the company; the rest of the divisions are probably in the average industry position.

**Hudson:** Substantial B-29 contracts are a formidable block to reconversion today. But Detroit believes that as the distance to Tokyo lessens, demand for transports will likewise thin, possibly permitting transfer of this work to some contractor plants.

**Kelvinator:** The big job under-  
taken by this company in its passenger  
plants has been aircraft engines.  
It feels that diminished demands  
in Germany falls may make it pos-  
sible to return its work to the prime  
aircraft engine builder.

**Packard:** A year ago this company's reconversion prospects were clouded (BW—Aug. 12 '44, p. 75), but strenuous work since then has changed the picture. Work on its Rolls-Royce aircraft engines has been moved to a new Detroit plant and a new Toledo division, making elbow room at the main works. Some car machining there plus a switch of body work to Briggs will bring Packard close to "average" position, far from its earlier tail-end place.

**Studebaker:** The South Bend member of the auto industry is making automobile engines for Weasel carriers; machining facilities are intact. So are its truck lines, used for military vehicles. It probably will be able to shift lightened aircraft engine parts work out of its main plants, putting itself in good position for change-over.

**Willys:** As a maker of jeeps and engines for them through the war, the Toledo company can probably switch to civilian production as fast as anyone.

**Graham-Paige:** This concern intends to reenter the auto field, probably with an extremely advanced line of cars (BW-Oct.21'44,p19). Extensive subcontracting might make assembly possible in Detroit without untoward delay, but the job of getting a completely new car started may put the firm a year or so behind its competitors.

## Foremen Warned

**G.M. makes direct attack on unionization of supervisors. Packard follows with NLRB election outcome in the balance.**

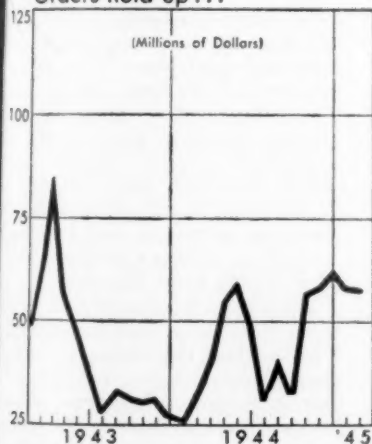
General Motors Corp. launched this week the first determined attack on foremen's unions since the National Labor Relations Board gave the new movement a bright green light a fortnight ago (BW-Apr. 7 '45, p.86).

Packard followed almost immediately with a similar thrust. Some 1,100 Packard supervisors are directly involved in NLRB's decision to recognize foremen as appropriate bargaining units under the Wagner act. The company's action looked like a one-two punch at the cocky Foreman's Assn. of America, which has already started campaigning to carry a collective bargaining election at Packard, the first such that NLRB has ordered.

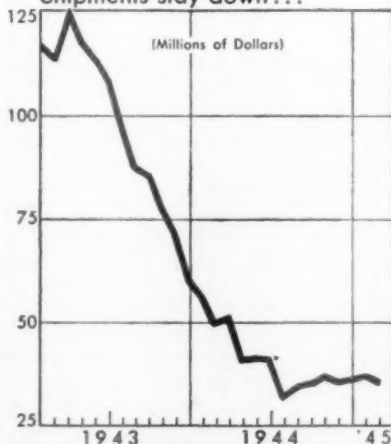
• **Letters Sent Out**—G.M.'s move, which Packard followed, was to address 20,000 letters to foremen over the signature of C. E. Wilson, president, telling them that if they organized into unions they could no longer function as management members, and that "their

## MACHINE TOOLS—RECONVERSION BOTTLENECK?

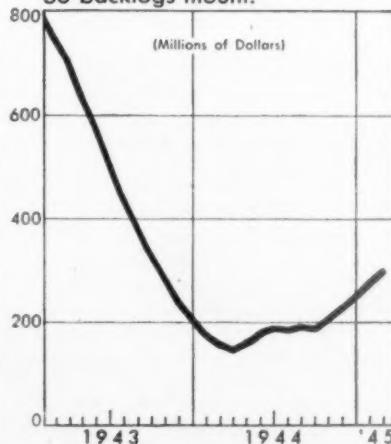
## Orders hold up...



## Shipments stay down...



So backlogs mount.



Machine tools are tight, but not so tight they will jam reconversion. Tool companies lost skilled manpower while production dropped from its peak in 1943 as order backlogs were worked off. So shipments leveled off just above \$35,000,000 a month even after orders snapped back. After V-E Day military needs will ease enough to permit some, but not all, reconversion orders to be filled. Of the \$300,000,000 order backlog as of Mar.

1, 1945, \$90,000,000 represented Russian orders for delivery within six months (though they may be delayed), and \$130,000,000 represented military orders—many for rocket, naval, and other programs that will not be canceled when Germany falls. The remaining \$80,000,000 or so covers unrated orders—mainly for reconversion. Civilian orders fell off when deliveries failed to come through but will mount after V-E Day.





No longer cotton's king, William Clayton, Assistant Secretary of State, and his family still retain a \$25,000,000 stake in Anderson, Clayton—which means a 40% voting power.

authority and responsibility would have to be changed." And to mobilize the widest possible industry support behind its position, G.M. sent H. W. Anderson, its labor relations director, to New York to appear before a meeting of the American Management Assn.

Explaining his statement, Wilson said that the Wagner act prohibits management influence of workers, and that transmission of policies through the foremen would therefore become impossible, necessitating some new and as yet undetermined layer of management in the shops. Foremen, he indicated, would become a variety of straw bosses.

• **As the Company Sees It**—The letter to the supervisors bluntly told them that their joining of a union would indicate lack of qualities required in managers. It said:

"Qualities required in successful managers are individual ability, initiative, and cooperation. It is these qualities that raise the value of their services above those of the people they supervise. Therefore, any member of management who requires an outsider to represent his interests does not have these required qualities."

It predicted that the consequences of

supervisor unionization would be "decreased efficiency, higher costs of production, higher selling prices, and reduced employment opportunity."

• **An Outright Hope**—The letter closed with an outright hope that "you will decide against" joining a union for representation purposes.

Wilson stated that he did not feel the letter violated Wagner act provisions regarding employer influence over an employee on labor union matters. In this respect, his stand coincided with the General Motors position that foremen are management representatives, "not mere traffic cops of industry."

Detroit offices of the NLRB made no immediate comment, but indicated both the G.M. and Packard communications might wind up in Washington for scrutiny as attempts to influence the outcome of the Packard poll.

## Cotton Colossus

Anderson, Clayton & Co.'s epic is spotlighted with some startling figures as result of public sale of 250,000 shares.

Not many people are likely ever to know just exactly what the world's biggest cotton merchant does, but the mystery at least has been stripped from how big he is.

Anderson, Clayton & Co., a concern started in 1904 by four young men—Will Clayton, his brother Ben, and two brothers-in-law, Frank and Monro Anderson—with a reported investment of \$3,000 apiece, did a \$272,134,230 business in 1944. It had total assets of \$150,000,000, a net worth of more than \$50,000,000. Net income in the last five years has ranged from a low of \$4,325,857 in 1941 to a high of \$8,910,228 in 1942 (fiscal years ending July 31, the same end as the cotton crop year).

• **Long Lines of Credit**—The firm has handled 45,000,000 bales of cotton in the last 20 years, and a business on that scale involves long lines of credit. Anderson, Clayton & Co. was into the banks for as much as \$137,000,000 at one time in 1929, had borrowings of more than \$86,000,000 this last Jan. 31.

Those are some of the things that heretofore never have been known about the firm, which was run by Will Clayton until 1940 when he dropped out of the active management to become Assistant Secretary of Commerce under fellow-Texan Jesse Jones. These facts came to light with the public sale of 250,000 of the company's shares from the holdings of the M. D. Anderson

Foundation, a charitable trust created by the late Monro Anderson, through nationwide investment banking

• **On Way to Big Board**—These shares constitute almost exactly one-sixth of the present common stock in Anderson, Clayton & Co., and the price of at which they were publicly offered last week puts a value of some \$66,000,000 on the total of 1,501,031 shares outstanding. And, if the company's present mature, this common stock will move its bow in New York Stock Exchange trading in due course.

Active management of the company now is under the direction of L. B. Fleming, Jr., president, and Harry Whittington, executive vice-president. Lean 6 ft.-3 in. Clayton, his mane hair and Mephistophelean eyebrows graying at 65, continues inactive in the firm now that he has moved to the Commerce over to the State Dept., he and his family retain a shade of 40% of the voting power, a stake something over \$25,000,000.

• **Hard-Working Founder**—To longtime associates in Houston, it seems a little strange not to have the hard-working founder at the controls. The story, possibly apocryphal, is that about the time his wife, Susan, suggested that it would be nice to get away from the heat of a Texas summer for a vacation in Vermont, Clayton unwound from his wicker chair on the porch and started packing forthwith. Next day they were off.

But no sooner had the Claytons come settled in a village in the Vermont hills than the local telegraph operator peace and quiet began to be ruined by messages for the lanky visitor. May it was the flood of messages, perhaps because the code circumvented the gossip, but in any event the operator shortly informed Mrs. Clayton, who characteristic New England finality, "any man as busy as your husband has no business having a vacation, least of all in a little town like this."

The Claytons broke off their vacation as precipitately as they had started.

• **A Far-Flung Operation**—The scope of the Anderson, Clayton operation is such that the telegrapher's observation was too far from the mark. The company and subsidiaries maintain cotton-buying organizations in the U. S., Brazil, Mexico, Argentina, Peru, Paraguay, and Egypt. In addition, there are sales branches, agencies, and subagencies in the major textile centers of the U. S. and other consuming countries.

The company's owned and leased gins, compresses for compacting cotton bales to save shipping space, and warehouses dot the cotton South from California to North Carolina. Domestic



subsidiaries own 19 oil mills to process  
cottonseed, operating 18 at present, and  
one of them are equipped with re-  
fineries. Cake and meal are sold under  
the company's trade name of Paymaster.  
**Ramifications Abroad**—Foreign sub-  
sidiaries own 14 oil mills and 75 cotton  
mills in Brazil, Mexico, Argentina, Peru,  
Uruguay, and Egypt. Most of the  
mills refine their own oil, and in Brazil,  
Mexico, and Egypt, subsidiaries manu-  
facture cooking and salad oils and laun-  
dry soaps. Oil, meal, and cake are sent  
to world markets.

Other ramifications of the business  
include an insurance company to cover  
marine and shore risk on the company's  
cotton business and a little for others,  
much of the hazard being shifted  
through reinsurance; a steamship ter-  
minal in Houston; a towboat, tugs, and  
other barges; a bank in Mexico specializ-  
ing in crop financing; a concern for  
making and maintaining machinery of  
the type used by the company, which  
has been turning out ordnance for the  
army since early in 1942; and a farm  
to breed and distribute certified seeds.

**Born on Cotton Farm**—William  
Clayton Clayton, born on a cotton  
farm near Tupelo, Miss., was the son  
of a railroad contractor whose work  
brought the family on the move. The boy  
attended school at Jackson, Tenn., when  
he was six and quit when he was 13 to  
become a court stenographer. In spare  
time he worked in Jackson's leading  
hotel.

About the turn of the century, Clay-  
ton entered the cotton business at \$65  
a month, his industry and neat work  
having commended him to Jerome Hill,  
then head of the American Cotton Co.  
Collapse of this company in 1904 re-  
sulted in the Anderson and Clayton  
boys' pooling their \$12,000 and setting  
up as merchants on their own.

**New Sources Developed**—Until the  
thirties, the Anderson, Clayton business  
was largely in American cotton for U.S.  
and European mills. But, when Clay-  
ton saw the domestic crop being re-  
stricted in an effort to put prices higher,  
he expanded rapidly in other producing  
areas which he figured—and accurately  
—would undersell this country.

Particular expansion was in Brazil.  
From 60,600 bales of Brazilian cotton  
handled in the 1935-36 crop year, the  
firm's business in the Latin republic  
rose to a peak of 486,000 in the season  
ended July 31, 1944. Rising volume in  
other producing countries was nipped  
by the war, however.

Anderson, Clayton's one unprofitable  
year of the last seven on which figures  
have now been made public was that  
ended July 31, 1939, when poor crops  
and hurried prewar liquidation resulted  
in a loss of just under \$70,000.

# Conference Frivolities Taboo

San Francisco stresses war role in its preparations for the United Nations parley. Plans are complete for the two biggest jobs—housing and feeding the delegates and their staffs.

The gay banners, silk hats, and sumptuous feasts characteristic of world diplomacy on a spree will be missing when representatives of the United Nations gather in San Francisco on Apr. 25 for their world security conference.

• **Not a Convention**—Consistent with the wishes of the State Dept., the city at the Golden Gate—with an unac-  
customed reticence that is heartbreak-  
ing to promotion-minded California—  
will forego all but the most essential  
elements of a warm welcome. The pa-  
ramount thought in San Francisco's  
preparation for its role as host has been  
that the United Nations Conference on  
International Organization is not a con-  
vention in the American tradition but  
a business meeting.

Mayor Roger D. Lapham wants his  
guests to take home with them an im-  
age of an American city in wartime—  
the congestion, the food dislocations  
and shortages, the curtailment of pub-  
lic services, the inconveniences which  
have been our common heritage of war.  
San Francisco has all these in abun-  
dant.

Having survived a wartime increase  
in population from 634,000 to almost

800,000 and still found room for a  
floating population of servicemen and  
civilians in uncounted tens of thou-  
sands, San Francisco wasn't much  
daunted by the prospect of another  
5,000—or 25,000—mouths to feed.  
Nevertheless it took some doing to get  
the city in shape for the big parley.

• **Hotels Reserved**—Hotels were a focal  
point of concern, for they have shown  
close to 100% occupancy since Pearl  
Harbor. In its first appraisal of this  
problem, the State Dept. figured that it  
could get by with the transient space  
available in the city's seven top hotels—  
the 2,450 rooms in the Fairmont, Mark  
Hopkins, Sir Francis Drake, St. Francis,  
Palace, Clift, and Whitcomb.

But as the horizon of the conference  
widened, hotel requirements grew pro-  
portionately; now six more hotels have  
been designated for exclusive occupancy  
by conference officials or attaches. These  
are the Bellevue, Plaza, Californian,  
Stewart, Drake-Wiltshire, and Alex-  
ander Hamilton.

• **Guests Double Up**—The 4,000 tran-  
sient rooms in these 13 hotels will be  
vacated by Apr. 22, when the first big  
special trains bearing delegates and



In the heat of bustling San Francisco (above) delegates to the world security conference will find no gala frills but will get a close-up view of the congestion, shortages, and inconveniences of a typical American city during wartime.

## Crowded East to Receive Delegates

San Francisco isn't the only city making plans to house the delegates to the United Nations conference. Arriving at East Coast ports by ship and plane many of the dignitaries and their staffs will stay in New York and Washington for a few days before heading west.

In New York, several hotels have reserved large blocs of rooms. The Waldorf-Astoria, for example, is reported to have set aside 600 rooms, and the Commodore, Biltmore, and New Yorker smaller numbers.

Five special trains will carry foreign delegates, the secretariat, other government personnel, and representatives of the press, radio, and movies

from Washington and New York to San Francisco. There will be no deluxe accommodations, so the men who sign up last with the State Dept. will get the upper berths. Foreign governments pay the fare and meals of their delegations. Late arrivals will be put on planes in what space is available.

The five trains have been named to facilitate communication with their passengers en route. Delegates and barristers, for instance, will be riding aboard Del-Bar, while the early birds will be on the Pre-Con Limited, which leaves Washington Apr. 17. Press, radio, and movie talent will ride the Mora-Press.

their retinues are due in San Francisco.

Only permanent guests will be undisturbed, and even they will be obliged to find temporary quarters elsewhere if they happen to live on a floor taken over in toto by the State Dept. Hotel accommodations for persons having official business at the conference will be adequate, but all except the top dignitaries will have to double up.

• **Army Supplies Cars**—Transportation nightmares haunted the people in charge of arrangements because the business sessions of the conference are to be held in the War Memorial Opera House and adjacent Veterans Bldg. (BW-Mar.24'45,p17), which are more than an easy walk from the principal hotels, and because public transportation facilities are heavily overburdened.

The Army had a ready answer to this problem. Having already accepted responsibility, as a security matter, for guarding the delegates, the Army decided to solve both problems at once by putting its armed guards behind the wheels of 200 staff cars and providing taxi and bodyguard service in one stroke.

• **Sleuths Mobilized**—Police precautions have been tightened. Detectives from Chicago, New York, Los Angeles, New Orleans, and other cities will be on hand to screen the crowds at the railroad stations, hotels, and conference hall. Casual traffic, both vehicular and pedestrian, is to be diverted from the streets most commonly traveled by the delegates both to minimize congestion and to offer an added protection to the official guests of the city.

A corps of California highway patrolmen will help San Francisco police to provide motorcycle escorts where needed and to speed the flow of traffic. Federal investigative agencies also will

play a large, though necessarily secret, protective role.

One stumper for the military police is how to protect distinguished visitors during their leisure hours. As long as their movements are from hotel to conference and back, protection is simple, almost automatic. But if the delegates choose to step out at night, how can they be guarded?

• **Limousines for Chiefs**—San Francisco hopes to be able to line up enough private limousines for heads of all delegations, and these, signed over to the State Dept., will be available at all hours, for all purposes. Others in the delegations will have to join in the scramble for the city's 615 taxicabs or share the vicissitudes of wartime urban life on streetcars.

The Yellow Cab Co. is getting into the spirit of the thing by marshaling its linguistic resources. So far it has found that 75 of its drivers speak foreign languages. These drivers will wear identifying badges.

• **Cars Overtaxed**—The municipal railway and bus system, having tried mechanical remedies and found them wanting, is hoping against hope that it will get over the hump. Its 595 streetcars and 216 motor and trolley coaches are so inadequate to the job of hauling an average of a million passengers a day that nobody makes any pretense of civic pride in their behalf.

During rush hours, standees overflow onto the steps of the ancient cars, and the rear cowcatchers often carry as many as seven passengers.

• **No Extra Food**—The War Food Administration made a check of food supply when plans for the conference were announced, and so far has found nothing to justify alarm. WFA limits its domestic buying to military and lend-

lease needs, but in event of serious dislocations could, by forms of rationing, cause a flow of food into direct channels.

It has no present plan for securing more food for San Francisco.

• **Special Ration Board**—OPA's San Francisco office has set up a special ration board to deal with all rationing matters incident to the conference. This includes allotment of ration books to those visiting dignitaries who will be accompanied by private chefs and supplemental stamps to those San Franciscans who can demonstrate that they are virtually under diplomatic obligation to entertain a visitor of equal rank.

The special board will maintain liaison with the State Dept. in determining which of the applicants in the ration category are merely ambitious hostesses and which are legitimately expected to entertain.

• **Meals Govern Points**—Restaurants will have no extraordinary problem with ration points, which are allotted somewhat in proportion to the number of meals served. When, during a given period, a restaurant has used 80% of its points and can show that its business for the period will be greater than normal by 20% or more, OPA will grant a corresponding percentage of extra points.

One of OPA's worries is that the flux of well-heeled visitors may arouse black market operations. To guard against this, the price agency is fortifying its local enforcement staff with agents drawn from other West Coast areas. Pointed letters of warning have been dispatched to all merchants' associations and civic groups.

• **No Gas Concessions**—OPA contemplates no gasoline concessions. Buses and taxicabs already are receiving much gasoline as they can use in full-time operation. The Army will fuel its own conference cars and buses without regard to civilian rationing limitations and the State Dept. has ready access to all the gas it can use for official business.

The San Franciscan who would drive a visitor to the redwood forests will have to get by on his A book allowance.

• **Big Press Delegation**—Communications presented a towering problem. Some 800 newspaper, magazine, and radio correspondents are expected to cover the conference. The daily outpourings of their typewriters could fill several book-length novels. Many of the official delegations will expect to be in close telegraphic and telephonic communication with their foreign offices at home.

Pacific Telephone & Telegraph Co., Western Union, RCA, Mackay Radio & Press Wireless, and the cable company

# Housing Plans Come in Focus

Legislative proposals vary on many points, but agreement seems general on need for federal aid to meet vast shortage in housing, particularly for low-income families.

Washington officials who are trying to wade through the welter of postwar housing plans being advanced by industry, government, labor, and consumer groups, with an eye to recommending specific legislation, are not having an easy time. These plans generally recognize the desirability of framing as soon as possible a program designed to satisfy the tremendous potential market, but they diverge on many points.

• **Accumulated Need**—The country faces its greatest shortage of housing. Behind the accumulated wartime demand are deficits carried over from the World War and from the depression. Statistical estimates vary, but average figures indicate that during the ten immediate postwar years, the nation will need about enough new homes each year to rehouse families equivalent in number to the entire population of New Jersey.

Economists point out that a building industry geared to such a high productive level could play an important part in effecting full employment and in securing a substantial national income after the war. But they also recognize that the industry will not be able automatically to adjust itself to such a goal.

• **Fundamental Question**—Beyond the problem of getting sufficient labor and materials immediately after the war, there is a more fundamental one: The biggest part of the postwar need will lie among low and middle income families—the 79% who pay less than \$40 a month for housing. In the past, the industry has been able to realize what

it regards as adequate profits by supplying only a limited number of houses to higher income families. In its peak year, only 900,000 homes were constructed.

Businessmen and government officials agree that in order to fill the gap between industrial capacity and the 1,300,000 homes estimated as the yearly postwar need, cooperation will be necessary to lower construction and financing costs, as well as to cope effectively with a multitude of other problems which tend to shrink the market.

• **Committee Studies Plans**—The proposals of trade groups, and labor and government officials for tackling these problems will be reviewed in a report to be issued shortly by the Taft subcommittee on housing and urban redevelopment of the Senate Postwar Committee. The Taft report may contribute to the framing of legislation by Sen. Robert F. Wagner's Banking Committee and Sen. James E. Murray's Labor Committee.

Because the government, as subsidizer and risk taker, has a big stake in housing, establishment of a permanent mechanism for administering federal postwar policies probably will be the first order of business.

• **Favors Present Setup**—John Blandford, Jr., administrator of the National Housing Agency, argues that the present wartime consolidation in NHA of the Federal Housing Administration, Federal Public Housing Authority, and Federal Home Loan Bank Administra-

have converted the basement of the Veterans Bldg. into a nerve center of international communication. P.T.&T. has installed a ten-position switchboard, linked to its central office by an 8,000-ft. cable containing 900 pairs of wires. Direct wires will connect the conference hall with the principal hotels, and private leased wires will connect the State Dept. and many embassies in Washington with the scene of the deliberations.

• **History on the Hoof**—Western Union, with an augmented staff of telegraphers, teleprinter operators, and technicians, has installed facilities in the Veterans Bldg. to transmit and receive 75,000 words an hour of news copy or diplomatic dispatches in almost any language. City schools have agreed to excuse from classes for one-week periods 100 boys who will serve as Western Union messengers at the conference.

Special facilities also are being installed for radio pickups, photo transmission, and wireless communication.

• **Festivities Taboo**—If the State Dept. adheres to its announced intention, formal entertainment will be practically nonexistent. As head of the U. S. delegation and president pro tem of the conference, Secretary of State Edward Stettinius is expected to stage one official reception and let it go at that.

Banquets, or anything of a festive nature, are deemed discordant with the spirit of the conference and the wartime atmosphere in which it is held. Diplomatic authorities don't want to risk public reaction to frivolous overtones on the serious business at hand.

• **Leisure Diversions**—For a night away from it all, however, the visitor will find some carefully prepared art exhibits, the city-sponsored symphony, the opera, and the theater, as well as a selection of fresh shows, a broad range of night clubs, and a circus.



San Francisco will extend a few special privileges—such as private rooms and limousines—to ranking dignitaries such as (left to right) Lord Halifax, British Ambassador; Secretary of State Edward R. Stettinius; Soviet Ambassador

Andrei Gromyko; and Chinese Ambassador Dr. Wei Tao-ming, together with their counterparts from the other nations, at the security conference. Lesser lights, however, must double up, travel on crowded public vehicles.



tion be retained, as the simplest and most economical way of achieving consistent policies. The C.I.O. is supporting him, on the ground that all government housing activities are logically interrelated and should be brought together to avoid duplication or conflict.

Several producers' and citizens' groups also favor a unified housing authority, although they disagree on the form it should take. The Producers' Council, a group of manufacturers of building materials and equipment, is pulling for an over-all supervisory agency, with federal housing policies stipulated by Congress.

The Citizens' Housing Council would like to see the housing administrator made a cabinet member.

• **Loan Groups Opposed**—The chief opposition to a permanent NHA is coming from mortgage-lending groups who feel that it would stymie the federal agencies they deal with, and cramp the government's ability to maintain a sound financial policy. The U. S. Savings & Loan League believes that officials handling a public housing program would not be inclined to encourage thrift and home ownership.

According to the National Savings & Loan League, the credit agencies are

kept in a subordinate position in NHA. They claim that their functions must help support the public housing agencies; they are forced to filter the requests for legislative changes through intermediate officials; and certain elements of their functions are weakened in an agency dealing with general housing rather than strictly with financial policies.

• **An N.A.R.E.B. Suggestion**—Most of these groups urge that the credit agencies be returned to their prewar status with the Federal Loan Agency. The National Assn. of Real Estate Boards recommends that the major housing agencies be

## World's Highest Masonry Dam Tested in Miniature

On working models in the U. S. Bureau of Reclamation's hydraulic laboratory at Denver, government engineers are laying the groundwork for several vast postwar projects for harnessing western streams to electric generators and distributing their life-giving waters to arid areas.

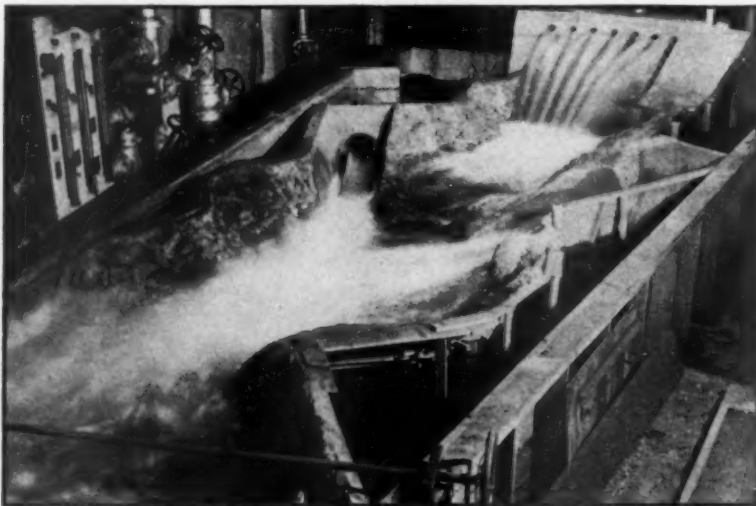
• **Realistic Effects**—One of the most spectacular is the miniature edition of Bridge Canyon Dam which the U. S. may fling across the majestic Colorado River gorge in Arizona. Built to a scale of 1 ft. to 60 ft., the model (below left) represents only the lower portion of the chasm and dam. Connections with high-pressure water lines provide realistic effects for the projection of the scientific studies.

Under one of three tentative plans, Bridge Canyon would be the keystone of the central Arizona project to develop hydroelectric resources and irrigate 500,000 acres of land potentially worth \$35,000,000 a

year in agricultural crops (BW—Oct. 28'44,p26). Whether it or one or two other projected dams are built may be largely decided by the experiments in Denver.

• **Higher Than Boulder**—At 763 ft., Bridge Canyon would be the highest masonry dam in the world—10 ft. higher than Boulder Dam which impounds the Colorado to form Lake Mead a little farther downstream from the new dam site (above right). Water in excess of the 3,700,000 acre ft. which the new dam would store is to go on downstream to Lake Mead and to the Salt River area to the south via a 72-mi. irrigation tunnel.

The project calls for an 1,880-ft. wall across the deep gorge, requiring some 5,600,000 cu. yd. of concrete—almost 50% more than Boulder and about the same as California's Shasta Dam. An innovation is the plan to build right in the base of the dam a power plant which



would contain six 125,000-kw. generators. Total cost: \$881,000,000.

• **Costs Slashed**—In working out problems of Bridge Canyon project, the bureau can count the time and money well spent on its experiments with models. By such miniature layouts the Denver laboratory has discovered a means of saving about \$20,000,000 on the Central Valley irrigation project in California (BW—May 13'44,p21).

The discovery was made on a huge model of the Sacramento-San Joaquin River delta which showed exactly how far upstream Pacific tides would contaminate irrigation waters in the two streams with salt water. Armed with this knowledge, engineers found that \$8,000,000 in alterations to existing channels would permit safe transfer of Sacramento River water southward. These alterations would eliminate need for a proposed \$32,000,000 canal previously thought necessary.



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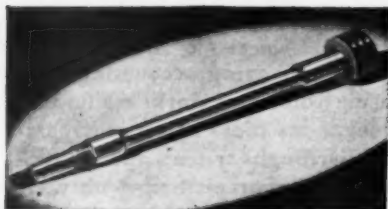


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### CAMPING OUT WITH A PURPOSE

Early spring was a welcome relief—especially for a bevy of Quartermaster teams that put in most of a tough winter outdoors in Maine. Their designation “wet-cold” detachment, describes accurately their volunteer services in preparing Army field combat equipment. Not only did they shave (left) outside winter temperature near the zero mark, but hiked up to 20 miles a day, crawling through snowdrifts, waded in icy waters, slush and mud. Then they came home to cook supper (right) in frigid open-air kitchens. Made up of men chosen from the fighting fronts, the teams added to the Army’s knowledge of types and quantity of clothing required for top combat efficiency, on the kind of equipment and shoes needed to reduce frostbite and trenchfoot cases.

solidated into two: a Bureau of Housing & Urban Research and a Federal Home Finance Board.

Next in line to be ironed out are questions of actual housing policy. Most housing interests urge the earliest possible relaxation of wartime controls, so that industry can act swiftly to take up the slack of war contract cutbacks and to relieve the most pressing shortages.

• **Four-Point Program**—Following this, many of them believe that action should be taken on four main fronts:

**Lower construction costs.** The National Assn. of Real Estate Boards and several other groups recommend that the government encourage cities to eliminate outdated building codes (ordinances regulating construction materials, methods, etc.). Other plans, advanced by labor and governmental representatives, include vigorous antitrust action against price-fixing and other restraints; supervised zoning; and regulation of subdivision and land use.


Permanent stabilization of wages, employment, and production in the housing industry is being advocated by labor officials and private economists.

**More comprehensive research.** Practically all organizations agree that better research—both statistical and technical—will be indispensable in lowering costs and stabilizing the industry. The majority seems to feel that such research should be coordinated and directed by the federal government, and that funds should be made available to local authorities for research purposes.

**More flexible credit.** Government officials are recommending the passage of three bills (S. 179, S. 180, and S. 101) which would permit federally chartered savings and loan associations to invest their funds in any mortgages or property improvement loans insured by the Federal Housing Administration and to carry on mortgage operations in larger territory.

These bills would also authorize the U. S. Treasury to buy the debentures of Federal Home Loan Banks. Mortgage-lending institutions have generally O.K.’d these proposals, and builders’ groups have joined in advocating longer amortization and smaller equity risks.

C.I.O. and National Housing Agency officials favor low-cost credit and mortgage insurance for builders, to encourage



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I was that boy on the tractor.

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In my heart was the glow of pride. I was anticipating the words "well done" from my father when he saw the clean, straight furrows, the crumbled surface of the soil—to provide a seedbed for the season's grain.

I didn't appreciate then, the sturdiness of those giant tractor tires.

Today as I drive my tank destroyer through the churned earth of battle...meeting sterner tests, greater obstacles, I know well their qualities...their unflinching grip, their traction...their sturdy dependability—called *backbone*!

Tested by the demands of war, the tires, like the boy, show that quality men call *backbone*...the ability to shoulder a job, to master it no matter what the obstacles.

That quality was developed long ago by men who first had faith in rubber. In tires they put it to work for the farmer, the logger, the road builder, the quarryman, and the miner.

With war these Peacetime skills were turned to new and stern demands. The tire builders who fashioned the tractor tire of '41 met the challenge for greater loads, greater stresses, greater speeds in the tank destroyers, Army trucks and tractors, Super Fortresses—Navy fighters that land on carrier decks—for every tire-borne vehicle of war.

In this you had an important hand. Because you liked our tires, we put more men to work building them. More scientists, engineers, textile experts and craftsmen pooled their skills in the common effort of building better tires to serve your needs. You helped us grow. You made us strong.

When war came we were ready. And the lessons gained from war will serve us in building better tires for the constructive days ahead.

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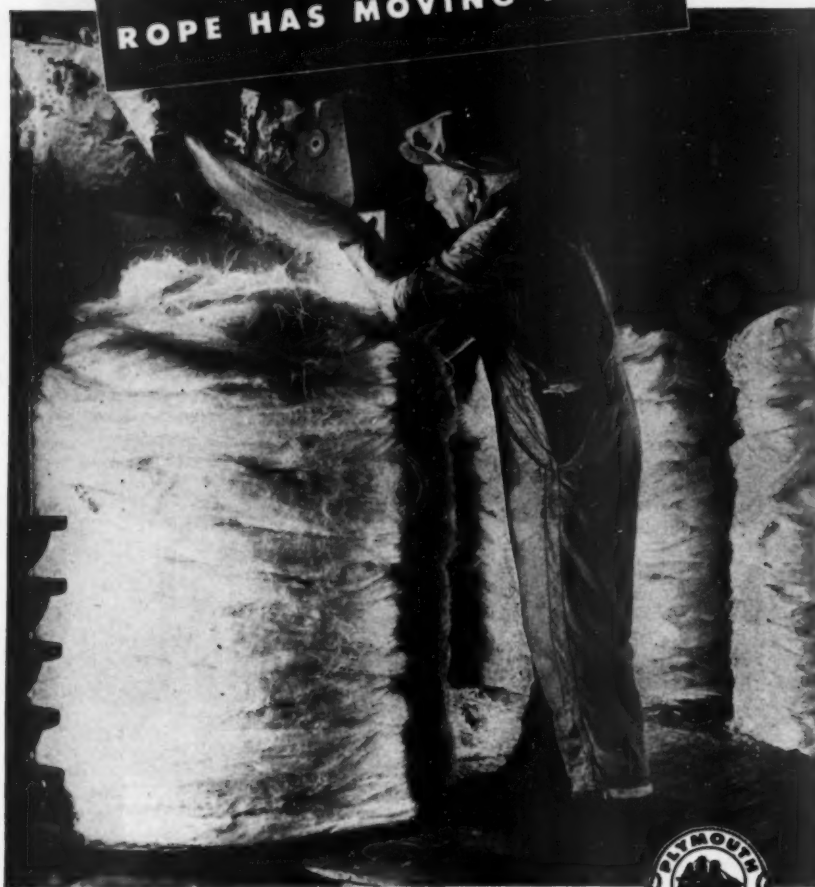
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David Dietz, Science Editor of Scripps-Howard, tells of an amazing discovery he made when he visited the world's largest rope plant.



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large-scale construction. The A.F.L. would like to see home buyers' equity protected against unemployment and other emergencies.

**More low-rent housing.** To encourage a large postwar investment in rental housing, the American Institute of Architects and several producers' and financial groups urge an overhauling of the present tax structure.

Government officials, along with certain mortgage banks and insurance concerns, favor a yield-insurance plan which would permit life insurance companies to own and operate rental housing, with a low return guaranteed by the government.

Labor representatives want special consideration for mutual home ownership corporations in disposing of permanent war housing. Incidentally, they agree with other housing interests that temporary housing should be quickly removed, unless it is urgently needed.

• **Need Is Widespread**—These various proposals would undoubtedly make it easier for the housing industry to fill a wider range of needs than it can at present. But according to representatives of labor, citizens' groups, and the Federal Public Housing Authority, the industry still could not produce at sufficiently low prices to cover the needs of low-income families.

Pointing out that even in the war year of 1942 there were nearly 5,000,000 families with annual incomes between \$1,000 and \$1,500, FPHA recommends an expanded postwar public housing program.

• **To Seek Larger Subsidy**—FPHA officials are now winding up a nationwide survey of local needs, on the basis of which they expect to request an additional subsidy authorization from Congress. The FPHA's postwar plans include amendments to the U. S. Housing Act which would permit immediate governmental loans to local authorities for advance planning.

These amendments would also enable the FPHA to acquire any project in default by local officials, and continue its operation for low-income families.

Finally, FPHA would reduce the annual-contribution period from 60 to 45 years, and would sanction the creation of a revolving fund, with FPHA money re-used as loans are made good. Commissioner Philip M. Klutznick of FPHA believes that these changes, together with FPHA's regular annual contributions as security, should enable local officials to finance 100% of the capital costs of public housing by direct borrowing from private investors.

• **Attack on Costs**—Arguments against public housing, now being advanced by builders' groups and lending institutions,





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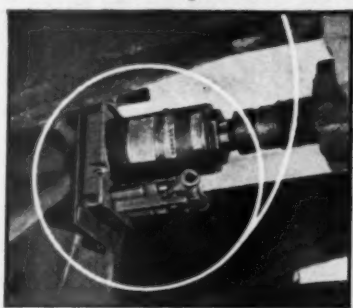
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**MUSCULAR ELECTRONICS**

Latest to emerge from military secrecy is the electronic control stick (right), designed primarily to reduce pilot fatigue among bomber pilots on long missions. Developed by Minneapolis-Honeywell Regulator Co. in cooperation with the Air Technical Service Command, the control utilizes the servo motors of the Autopilot, the automatic flight device used when the bombardier takes control of the ship during the crucial target run. Pilots, instead of exerting forces of up to 100 lb. to control bombers, now achieve the same result by a one-pound pull with one hand. Another end result of the device is flight accuracy hitherto impossible with big ships—or small ones. Developed principally to hold bombers in protective forma-



tion patterns, the stick is slated for definite role in the ever bigger planes that are projected for tomorrow.

center around the allegedly exorbitant cost of dwellings constructed under the U. S. Housing Act; the failure of some local officials to meet the "one for one" demolition clauses; the planlessness with which much of the housing has been built on the edge of cities while interior slums remained; and the charge that the lowest-income families have generally not been allowed to occupy the public projects.

These organizations recommend that such families either receive local relief or be housed by private industry operating under government subsidy.

• **FPHA Argument**—Public-housing advocates reply that the FPHA has provided more efficient housing than have the limited-dividend corporations sponsored by the Federal Housing Administration. They contend that private housing for low-income families would require extensive governmental supervision, and that rent relief would be more costly and cumbersome than the existing public housing program.

All shades of housing opinion agree that postwar construction should follow a master plan of coordinated redevelopment, for both urban and rural areas. In recent years cities have been hit by an increasing trend to locate homes in cheaper suburban districts, leaving greater interior areas slum-ridden and practically untaxable. The growth of rural slums has been equally rapid but less publicized.

• **Federal Assistance**—Current redevelopment plans vary in administrative details, but most of them stipulate that (1) actual city planning should be left up

to local officials; and (2) some measure of federal financial assistance will probably be necessary, to absorb the mark-down between acquisition costs of slum areas and their value in new uses.

Few of these plans come to grips with the specific problems involved in acquiring slum sites. FPHA officials suggest that the method of financing public housing also be used for urban redevelopment. The Citizens' Housing Council advocates federal loans, as well as subsidies, and suggests that the amount of subsidy should not exceed the interest on government loans. Other groups—such as the Producers' Council—are against any form of governmental financial help whatever.

• **Unions Back Plan**—Both the AFL and the C.I.O. favor the use of FPHA funds in assembling land. They urge that land acquired and improved should be made available to private enterprise, with proper safeguards to prevent future slums.

Proposals pending in Congress—the Thomas bill (drafted by Alvin H. Hansen, a Federal Reserve Board economist, and the Wagner bill—would provide loans to cities at 1% interest. Theoretically, these loans would be repaid out of net returns on the lease of land to private development companies. Actually, however, net rentals might never cover the original loan. In that case, the government would make up the difference.

As one logical step in replanning, the FPHA holds that local governments should try to check deterioration before it has a chance to spread. Officials have recommended congressional authoriza-

for loans and annual contributions to local agencies for rehabilitation purposes. These annual subsidies would be reduced down from 60 to 30 years, and would generally be slightly larger than subsidies for new construction.

**Aid for Rural Areas**—Officials of FHA and the Dept. of Agriculture are holding frequent meetings, in an effort to figure out some solution to the rural housing dilemma. The Dept. of Agriculture's Inter-Bureau Committee on Rural Planning is conducting local surveys to check on rural housing needs and facilities. No specific amendments have yet been developed which would enable the U. S. Housing Act to extend home ownership, as well as lower rents, to poor farmers.

Agriculture representatives, however, have recommended that land banks be authorized to lend 70% of the value of land and farm buildings, in accordance with each farm's long-term earning capacity. They believe that farmers should benefit from FHA mortgage insurance. And they would like to see the Bankhead-Jones Farm Tenancy Act expanded to continue 100% loans on each farm's earning capacity, and to allow farm owners to improve or replace their homes.

#### CORN INSURANCE TEST

Shortly after May 1, Agricultural Adjustment Administration officials will have their first idea of how the nation's main corn farmers are going to react to the new experimental insurance program recently set up for that crop (BW-Dec.9'44,p.28). That date is the deadline for filing insurance applications in Chester County, Pa., and Kent County, Md., the first of 20 counties to be tested by AAA.

The original crop insurance program was killed by Congress (BW-Feb. 11'44,p.32) as too costly, but widespread squawks from farmers caused its reinstitution. Primary crops covered under the new law are cotton, wheat, and corn, but experimental insurance (limited to the 20 representative counties) in several other crops, including corn, tobacco, and citrus fruits, is authorized. A high percentage of the farmers in the test areas elect to participate, the insurance may later be offered throughout the country.

On the basis of past experience, a favorable response is expected from these first two counties. When the old wheat insurance program was in effect, farmers in Pennsylvania and Maryland participated to a higher degree than those in most of the rest of the country. A similar test on tobacco will get under way shortly in Bourbon and Larue Counties, Ky.

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## Works Two Ways

Antistrike law sometimes turns to union's advantage, but Baltimore decision proves that it can favor industry, too.

Organized labor originally opposed the War Labor Disputes Connally-Smith Act because it seemed likely to strait-jacket unions. After it was passed the unions shifted their ground and adopted the law as still another stick with which to beat the industry dog.

• **Move for Protection**—Lately, some employers have concluded that the

Connally-Smith law is antibusiness instead of antilabor; John L. Lewis' exploitation of the statute to get a vote to strike from his miners (BW-Mar. 10'45,p100) is a case in point.

But pondering what has just happened in Baltimore, Md., industry feels encouraged by a definite move for the protection of an employer's rights, and labor—specifically the A.F.L. Teamsters Union—is prepared to testify that the Connally-Smith law can cut two ways.

• **Big Damage Suit**—When A.F.L. teamsters climaxed a labor dispute with the James Gibbons Co., Relay, Md., by striking without complying with the act's formalities—a 30-day notice and a National Labor Relations Board strike vote—the company countered with a

\$500,000 civil suit for damages to road building, maintenance, and heavy construction work program. It named not only the local involved and organizers, but also the parent International Brotherhood of Teamsters, Chauffeurs, Warehousemen & Helpers.

After a hearing in the U. S. District Court at Baltimore, Judge William C. Coleman knocked the props from under the union with a decision holding the international union responsible for a violation of the antistrike law. This left only the amount of damages open, and an out-of-court settlement (reputedly \$4,000) was worked out between the union and company.

• **Another Blow**—While the teamsters still were recovering from the shock

## Tube Rebuilt While War Trains Roll Through

Without even slowing down the heavily laden trains of passengers and high-priority war freight which rumble through, engineers are rebuilding a 528-ft. section of a tunnel on the Baltimore & Ohio R.R. main line at Tunnelton, W. Va. Their job is to remove threats of a disastrous rock fall and to eliminate an 18-in. sag in the tunnel's brick lining which was shored up with timber 19 years ago.

• **Narrow and Low**—The original repair was wholly adequate in its day, but the false roof left a clearance too low for modern giant locomotives; three rows of support posts made the double-track tunnel too narrow for the oversize loads of war freight. In peacetime it would be comparatively easy to close the tunnel and reroute

traffic for a few weeks to make repairs; during a global war, it's next to impossible.

Bates & Rogers Construction Co., Chicago, took on the ticklish job which is now well along and scheduled for completion in late summer. Secret of its procedure is that the project was tackled from the top, keeping men and equipment out of the tunnel.

• **Ceiling Becomes Floor**—The contractor first dug a 130-ft. shaft from the ground surface to the top of the sagging brick arch. Then a timber-lined drift (below) was driven from the shaft floor along the top of the tunnel for the full length of the section to be rebuilt. Thus the top of the old brickwork became the floor of the drift.

Step by step from this start, the construction crew created a work chamber free of posts and obstructions. Crumbling masonry was then broken up with pneumatic concrete busters and removed, leaving in place the sound lower segments of the brick arch.

• **Old Timber Utilized**—Removal of the brick reveals the shoring installed in 1926. That timber is being left in place to carry the forms for the new concrete arch that replaces the sections of brick removed. On top of the forms goes a course of fire brick to protect the arch from locomotive blast.

Then the entire opening between the back of the remaining brickwork, the forms, and the sheeted roof is filled with concrete. The final step will be removal of the old timbering in the main tunnel, thus restoring it to original dimensions. Tunnel spoil is hoisted up the shaft.

• **Done in Sections**—Operations are carried along in sequence in sections 10 ft. to 15 ft. long. Concrete is pumped through pipes from the surface above the tunnel.

Air forced into the working from a blower on the surface maintains positive pressure in the work chamber and drift, keeping them free of locomotive gases which otherwise would seep in through the cracks in the masonry.

• **Little Time Lost**—A watchman warns the workmen of the approach of each train—giving them time to retire from working chambers into the drifts behind tight canvas doors. These retreats seldom delay the job more than five minutes.

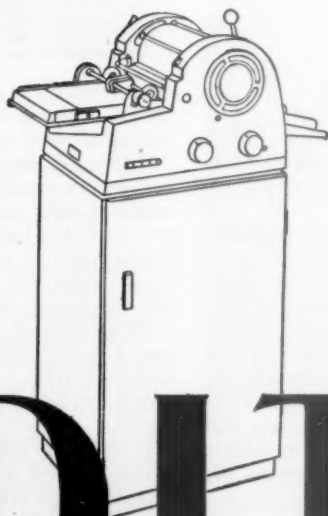




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Users of fluorescent lighting, engineers and maintenance men are improving their lighting service by installing G-E Watch Dog Fluorescent Starters. These manual reset starters are providing efficient service and positive protection for 30-, 40- and 100-watt lamps in commercial and industrial installations all over the nation. Here's why G-E satisfies all three.



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Users are protected from annoying blink and flicker of dying fluorescent lamps once and for all. Blinking cannot possibly recur once the Watch Dog cuts out.



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**BUY WAR BONDS AND KEEP THEM**

**GENERAL ELECTRIC**

management struck a second blow against mounting "unauthorized" walkouts, which in increasing numbers have been plaguing both management and the unions that have pledged to avoid wartime strikes.

With some 1,000 members of the United Steelworkers of America (C.I.O.) on strike, the Eastern Stainless Steel Corp., Baltimore, filed federal civil action asking \$500,000 in damages against the steelworkers' Local 1245. Again, the basis was failure of a union to give proper strike notice. Trial date has been set for Apr. 29. There is doubt that the case will come to trial. Another cash settlement is considered highly probable.

In filing its suit the company alleged that it had offered the union an "incentive bonus plan," and that in negotiations several days later the union made a counterproposal and gave the company until afternoon to accept it. When it failed to do so, the company said in its bill of complaint, union workers were called out in a strike without any notice.

**• Incentive Plan Is Offered**—Union spokesmen blamed company provocation for the strike, contending that the company had insisted upon reducing the number of men in hot-mill gangs. The union tried the arrangement for one month, and then, it said, insisted that hot-mill gangs be restored to former numbers.

The company's incentive plan was offered in an attempt to induce the union to accept the reduction in work forces, but, the union contends, the offer was rejected. Failure of the company to augment hot-mill gangs on subsequent shifts led to the strikes.

However, the steelworkers' district director sought to keep men on the job, advising them the work stoppage was ill-advised, contrary to the best interests of labor generally, and contrary to C.I.O.'s no-strike pledge.

The National War Labor Board also condemned the walkout.

**• Costly Strike**—But it was not until several hours after the company had filed its suit that a meeting of strikers—some 275 assembled, half walked out during prolonged debate—voted to go back to work, breaking the back of the walkout which an Army spokesman said cost enough cartridge cases to supply all American forces then across the Rhine in Germany for one day.

## WPB WARNS BOX USERS

Corrugated and solid fiber shipping containers, most critical items in many civilian production schedules, have been a major headache to WPB for months. Now WPB's Compliance Division is



## FOR DIPLOMACY

For weeks the War Dept. has pondered the necessity of having thoroughly to acquaint the public with some of the hard facts which must be faced after V-E Day in switching men and materials from Europe to Asia. To put over this tough assignment, the department has enlisted Arthur W. Page, vice-president of American Telephone & Telegraph Co., as special consultant to Secretary Henry L. Stimson. His job: to refine the Army's usually heavy-handed public relations techniques.

going to see to it that the quotas set under shipping box order L-317 are strictly adhered to.

The word was passed last week to the packers of several hundred civilian commodities, who not only were ordered to stick to the letter of L-317 in figuring quotas but also were told to keep their figures and records on hand for examination by compliance officers.

Packers who have not calculated their quotas do not have a quota, under last week's directive, and may not legally accept the delivery of any shipping containers.

If for any reason, such as lack of proper records, a packer is not able to compute his 1944 and 1945 quotas, he is advised to file an appeal with WPB estimating his total use of shipping containers in terms of footage and tonnage of board consumed.

WPB's Compliance Division has several hundred firms now under investigation for violations of the shipping box order.

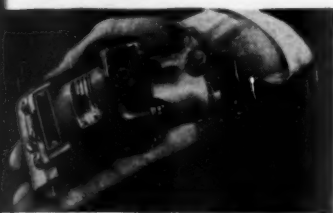
# The hydraulic "midget" that helps rescue men at sea!

U. S. Coast Guard had a good idea: Why couldn't survivors at sea be rescued by helicopter?

With characteristic Coast Guard energy they went to work. A hoist was designed which would lower a cable from a helicopter hovering overhead to a man in a life raft or in the water. The cable could be snapped to a special harness built into the man's life jacket.

But, when it came to finding a motor powerful enough to lift a heavy man quickly and smoothly . . . yet small, light and controllable enough, they were most stymied.

An engineer from Vickers Incorporated, a division of the Sperry Corporation, suggested that a *hydraulic* system would do the trick.



"Go ahead and try it," said the Coast Guard. "And fast, if you please!"

Shortly, the Vickers hydraulic hoist was ready. It was powered by a midget motor—a *hydraulic* motor no bigger than a man's hand. A midget hydraulic pump supplied oil under pressure.

The whole installation was small, light and *powerful*. That midget hydraulic motor could lift a 400-lb. load  $2\frac{1}{2}$  feet per second. It could be started and stopped—even reversed—instantly but smoothly. And, without brakes or clutch, it held its load without slipping.

When the Coast Guard's good idea was demonstrated at sea before high government and Navy officials, it proved a dramatic success. Four "survivors" were "rescued" from life rafts and transferred to a ship, in less than ten minutes!

## What makes this midget mighty?

Modern hydraulics—the use of oil under pressure to drive and control mechanical devices—enables hydraulic motors to deliver as much as  $2\frac{1}{2}$  horsepower for every pound of weight! (Most

airplane engines average not more than one horsepower per pound.)

Hydraulic motors also offer smooth operation, precise control, easy adaptability, simple, rugged construction.

Vickers Incorporated manufactures a wide variety of these piston-type hydraulic motors. Also hydraulic pumps and controls for every type of hydraulic power application. Their many advantages and economies suggest postwar uses in a wide variety of new equipment.



# SPERRY

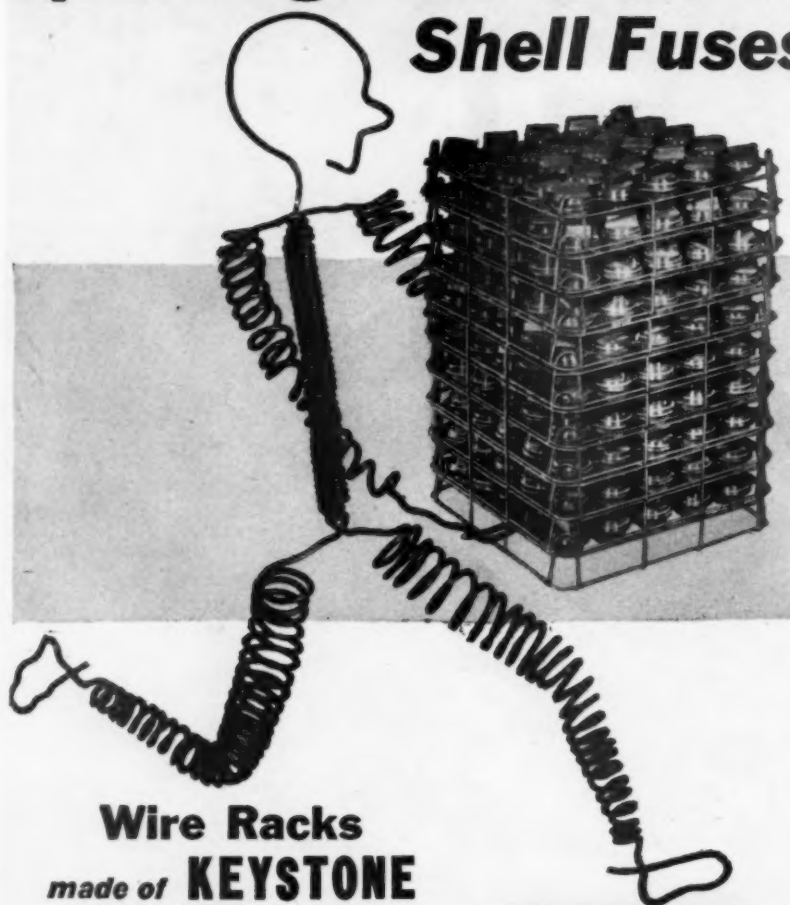
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## More Fish for War

Armed forces to get bigger share of catch than last year. Labor and ice shortages, and recent salmon slump, menace goal.

For civilians, the 1945 story of fish is the same as the story of meat—more for the armed services, less for homes, hotels, and restaurants. The government will take 70% of all canned fish as compared with 58% last year; total production may be lower than in 1944 but prices may be lower because of last week reduced markups for wholesalers and retailers.

• **Bad Year for Salmon**—Fishermen have set their 1945 goal 600,000,000 lb. above 1944 total production, but prospects of ice shortages and manpower difficulties cast a shadow over the hopes. To make matters worse, this is the year for the quinquennial slump in the western Alaskan catch of red salmon.

Red salmon from Bristol Bay, Alaska is (with Chinook) the best quality, and this year's catch will fall to perhaps one-half of 1944's because every five years since 1920 the result of some unknown blight is felt. It is not unusual for Bristol Bay canners to pack 1,800,000 cases (48 lb.) in the short season between June 25 and July 25 when the prize salmon run. But in 1930 the pack was only 362,000 cases; in 1935 only 272,000; in 1940, 444,000.

• **Fishing Curtailed**—The scarcity of red salmon recurs once in five years because these red salmon take that long to mature.

In an attempt to let the weak generation multiply, fishing is being curtailed this year in western Alaska, as it was in 1940. Nevertheless, the 1945 salmon pack is estimated at 5,000,000 cases compared with 4,850,000 last year. The difference will be made up by pink salmon. The catch was poor last year but should be good this year because of its biennial cycle. However, the armed services, which took 66% of the canned salmon last year, will need 80% of the pack in 1945.

• **Rosefish Finds a Place**—Total production of all kinds of fish has luckily risen during the war, thanks in good measure to rosefish, a fish that gets its name from its color and formerly was discarded as too spiny and small to market profitably. Rosefish landings in 1932 were barely 132,000 lb. but leaped to 118,000,000 lb. last year. The secret of marketing rosefish is that they are now filleted.

Because of rosefish, Gloucester, Mass., will again this year be No. 1 fish port.

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Arlex (Atlas Commercial Sorbitol Solution) is only one of the hundreds of chemical materials that Atlas has developed for commercial needs—many for wartime use. Combined, they offer a huge stockpile of ideas on which industry constantly draws for the improvement of processes and products.

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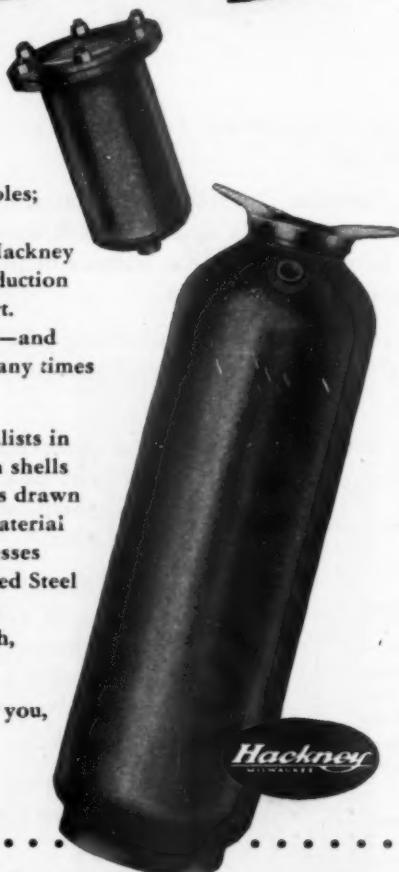


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Pressed Steel Tank Company are specialists in the manufacture of seamless deep-drawn shells and shapes of various sizes. Each shell is drawn from a solid circular sheet or plate of material by means of high-pressure hydraulic presses especially designed for this work. Pressed Steel Tank Company's special Hackney Cold-Drawing Process results in smooth finish, uniform thickness and temper.

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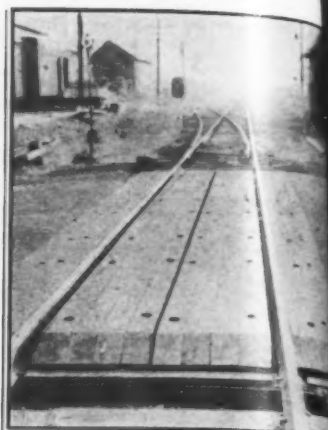
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## PREFAB CROSSINGS

New to this era of prefabrication the grade-crossing driveway in convenient panels for easy installation and quick removal. Designed and produced by Pittsburgh's Kopp Co., each 2x8-ft. section consists of creosoted hardwood timbers joined by spiral dowels. About 16 panels, bolted to the cross-ties with lag screws, form a typical crossing.

in the East, a rating it wrested from Boston when rosefish sales began to boom. Last year rosefish catches meant \$6,000,000 to Gloucester alone. Gloucester benefited most, for its slower fishing vessels were adapted to fishing for rosefish; it is closer to the northern banks where loads could be netted quickly, because the port had enough labor; and a pier was available for use of the fishing fleet. Rosefish, being night prowlers, can be netted only by daylight when they congregate near the bottom. Fishermen who enjoy a night's sleep like them.

● **Albacore Return**—One of 1945's hopes for quality fish lies in the mysterious story of albacore, No. 1 white tuna. In 1925 the albacore catch, all off California, was 22,000,000 lb. The following year it fell to 2,500,000 lb., and in 1933 collapsed to 500 lb., without anyone knowing why. Last year 54,500 lb. were taken, 20,000,000 off California, and 34,500,000 off Oregon and Washington, where formerly none was caught. Main port for landings of albacore is Astoria, Ore., whose smart fishermen this year hope to get \$390 a ton after discovering what they think is a loophole in the OPA regulation which held them to \$325 last year.

● **More Ships, Fewer Men**—Manpower shortages in the fishing industry are growing worse just as the boat situation eases. With the exception of tuna clippers and large trawlers (150 gross tons





## REBUT OF A SEASON

sure a sign of spring as the robin, S. S. George R. Fink unloads the iron ore of the season to reach Cleveland over the Great Lakes. From Escanaba, Mich., the 9,493-ton cargo was consigned to National Steel Corp. Warm weather got ships moving even before the buoys were placed and set hopes for another record season.

most fishing vessels taken over by the Navy for war use have been returned. Fishermen threatened by the draft left their well-paid jobs for the merchant marine, where their skills bring them more money than in the army or Navy.

Fishermen are making money. An indication of how much can be had is seen looking at the price they receive for haddock, a staple fish caught all year. In 1939 fishermen got \$2.73 per 100 lb., \$9.25 in 1943, and \$7.64 in 1944 (when CPA ceilings hit them).

Some 60 varieties of fish are under CPA price ceilings, but as wary housewives know, fresh oysters, mackerel, mullet, groupers, and red snappers are not. Each group has special reasons for being exempted, those for mackerel being the uncertainty of the spring run and the possibility that the schools of mackerel will elude the boats and vanish.

**Inventories Drop**—Cold storage holdings were the highest in history last Oct. with 132,000,000 lb. (1939-43 average 98,000,000) but melted away into homes, hotels, and restaurants even before the heavy buying of the Lenten

season. In cold storage Apr. 15 were less than 40,000,000 lb., only a little below normal, but the steady speed with which consumers ate up 92,000,000 lb. in the past six months because fowl and other meats were hard to get hints at what will happen to remaining frozen stocks.

The U. S. Fish & Wild Life Service considers commercial fisheries among the less progressive of all U. S. industries. The agency reports that the fisheries are slow to correct wasteful methods, to develop new products, to exploit virgin resources, or utilize all raw material.

But the backwardness, F&WLS explains, is the fault of the diffuse and widespread character of the thousands of companies faced with diverse problems.

Nor has the government helped fishermen as much as F&WLS wants it to; average government aid given farmers for each ton of food produced is \$7.04, for fishery products 82¢. Technological research, control of water pollution, and conservation are listed by F&WLS as some of the things the government could undertake.

But it was obvious this week that the fishing industry intends to do something itself. National Fisheries Institute, an employers group which expects to do advertising and other industry jobs for the fisheries such as the American Meat Institute does for the meat industry, met in Washington for the first time.

## LAKE FLEET ON ITS WAY

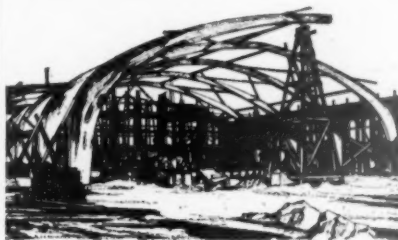
The Great Lakes shipping season (BW—Mar. 24 '45, p. 20), threatened with a bad start because of the ice left by the toughest winter in years, has taken a definite turn for the better. This week lakes operators were accepting their heavy shipping quotas without a murmur.

In addition to the ice, shortage of boxcars to unload ships filled with last season's cargoes, plus loss of manpower to the draft, constituted a serious threat until the Senate's Mead committee took a hand. Secret conferences brought swift action from various government agencies and private interests.

Pessimism began to wane when the ice melted so rapidly that ships were able to make the Sault Ste. Marie passage on Mar. 25. This enabled the Office of Defense Transportation to declare the season officially opened, two weeks ahead of last year, a full month ahead of 1943.

ODT's attack on the boxcar problem has freed ships of their old cargoes, and operators have been assured of such draft deferments as are needed in the 18-30 age bracket. War Shipping Administration has added ten over-age vessels to the lake fleet.

## Timber With a College Degree



GLUED LAMINATED ARCHES, 92' 4" span, prefabricated by Timber Structures, Inc. for Boeing Aircraft Company, Seattle, Washington.

Wood has recently gone through a growing up and educating process that makes it an amazingly versatile construction material for all sizes and types of buildings.

At no place in the entire building industry is the modernization of wood more apparent than in those structures where glued laminated timber arches and other members have been employed.

Timber Structures has pioneered in the development of glued laminated arches, trusses, beams, columns; oars and other products in the field of wood specialties.

Laminated members excite the interest of architects, engineers and contractors because they possess unusual strength, eliminating many supports and posts; they can be patterned to conform to engineering needs and to architectural design.

If you have plans for present or future construction work, we should like to talk to you about the availability, strength, permanence and economy of timber. Illustrated literature will be mailed gladly on request. We are prepared to serve you in timber and allied structural materials.

**TIMBER**  
WARD MAYER  
**STRUCTURES**  
INCORPORATED  
ENGINEERING IN WOOD

Portland 8, Oregon New York 17, N.Y.

# Boom Catches Up

**Twin Cities region finally has manpower pinch as war plants expand, but area still maintains fairly normal living conditions.**

Fourteenth largest metropolitan area in the nation, Minneapolis and St. Paul, joint capital of the central northwest agricultural empire, have throughout the war had a reputation as the "cities the war boom forgot"; only now is the boom catching up with the Twin Cities.

• **Nearer Normal**—Not that the Minneapolis region has failed to contribute mightily to the war effort—but relatively speaking, it has been less afflicted by rising living costs, food shortages, and wartime industrial expansion than any comparable area. Until five months ago, when war contracts began to expand again, manpower problems were less troublesome than in many localities.

Travelers coming to Minneapolis and St. Paul marvel at the offer of one-day laundry service and overnight dry-cleaning service in hotels, the reasonable certainty of rail accommodations, the 85¢ luncheons and \$2 dinners—including tenderloin steak—at best restaurants.

• **Costs Held Down**—Statistics bear out these observations. Cost of living in Minneapolis, says the U. S. Bureau of Labor Statistics, has risen 22% since 1940 (smallest increase of any of 34

cities regularly checked by BLS), against a national average rise of 26% and an even greater increase in many metropolitan centers—Pittsburgh 27%, Norfolk 34%, and San Francisco 33%.

Department store sales, partly influenced by rising prices, partly by expanded buying, are up 49.9% in Minneapolis-St. Paul, 40.1% in the Federal Reserve's ninth district, 61.7% over the nation. Total income payments rose 71% in Minnesota, 84% in the ninth district, 96% in the nation between 1939 and 1943, according to the Dept. of Commerce.

• **Maybe War Plants**—The Twin Cities have, of course, made a significant contribution to war production, even if they haven't reaped a boom. The region has its Northern Pump Co. (naval gun mounts, rockets), Minneapolis-Honeywell Regulator Co. (autopilots, turbo-superchargers, gunsights), Twin Cities Ordnance Plant (small-arms ammunition), Gopher Ordnance Works (just started making smokeless powder), and its shipbuilders such as Cargill, Inc., Butler Shipbuilders, Inc., Globe Shipbuilding Co., the latter two at Duluth-Superior.

And among others on the long list are the mechanical division of General Mills, Inc. (naval fire control apparatus, torpedo directors), Heidbrink division of Ohio Chemical Co. (just completed its 1,000,000th oxygen mask for aviators), Minneapolis-Moline Power Implement Co. (heavy shells, maritime equipment), International Harvester Co. (airplane

cannon). Production records are impressive, the "E" and "M" are numerous.

• **Small Part of Total**—But for all that the three metropolitan counties encompassing Minneapolis-St. Paul have received since June, 1940, only \$1,600,000,000 of war supply and facility contracts out of the \$207,000,000,000 national total. And that \$1,600,000,000 is 72% of all such contracts let in the four states comprising the Central Northwest.

This record of the Minneapolis-St. Paul area, with its 902,000 population, may be compared with other areas of relative size. The Buffalo (N. Y.) area, with 961,000 population, has received \$4,500,000,000 in contracts; Cincinnati with 834,000 persons, \$2,300,000,000; Milwaukee, with 762,000 inhabitants, \$2,800,000,000; Houston, one-third smaller with its 601,000 population, \$1,700,000,000.

North Dakota, South Dakota, and Montana—part of the Minneapolis-St. Paul trade area—have the lowest volume of war contracts of any of the 48 states. Their four-year record: North Dakota, \$8,300,000 in contracts; South Dakota, \$70,000,000, including \$66,000,000 for facilities, chiefly an air base; Montana, \$75,000,000.

• **Food and Manpower**—But the record of this region's war service is not written in statistics on industrial output. Its chief contributions are food and manpower.

Farm production statistics show the



Minneapolis and St. Paul, relatively unhit by wartime conditions, are now undergoing expansions in war industries, and manpower is getting scarce. Notable war contributions of the Twin Cities are men, food, and specialized materiel.



# Smashing Hammer Action



# Machine Gun *Speed*

**Black & Decker Electric Hammers make  
quick work of tough jobs . . .**

**drive star drills, bull points, spikes, cold chisels,  
wood chisels, bushing tools, many others.**

Black & Decker Portable Electric Hammers deliver knock-out blows to any hammering job from light scaling to heavy demolition. These high-speed, hard-hitting Hammers drill or channel in brick, stone and concrete . . . chip, clean and scale metal . . . gouge, shape and notch timber . . . drive spikes . . . tamp and vibrate concrete forms . . . scuff concrete surfaces and remove form marks . . . handle brute-force demolition . . . save time and effort on an endless variety of jobs from caulking and seaming to tree surgery.

Amazingly husky but light in weight, a Black & Decker Electric Hammer is completely self-contained . . . requires no transformer or extra equipment . . . is powered by a rugged universal motor that drives a positive-gear hammer mechanism . . . operates wherever there is an electric outlet, AC or DC, or from a portable generator. Made in 4 models, all rated by drilling capacity in concrete: for holes up to  $\frac{1}{2}$ ", \$85; to  $\frac{3}{4}$ ", \$115; to  $1\frac{1}{8}$ ", \$145; to 2", \$195.

Our free "Hammer Handbook" is packed with facts and on-the-job photographs which show how Black & Decker Portable Electric Hammers make quick work of tough hammering jobs in dozens of trades and industries . . . and how they can save time, labor and money for you. For your copy, write: The Black & Decker Mfg. Co., Dept. 604, Towson 4, Maryland. (In Canada: Toronto 1, Ont.) For expert help on any tooling problem, call your nearby Black & Decker Distributor.

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# Black & Decker

PORTABLE ELECTRIC TOOLS

## A HAMMER TOOL FOR EVERY JOB

**STAR DRILL:** For clean round holes in concrete, brick, cement, etc.

**BULL POINT:** For demolition work on concrete, stone, brick, etc.

**SPEED BIT:** Cuts small holes faster than star or diamond drills.

**COLD CHISEL:** For chiseling, scaling, surfacing concrete or metal.

**WOOD CHISEL:** For cutting in wood and compositions.

**BUSHING TOOL:** For removing form marks or scuffing concrete surfaces.

**SEAM TOOL:** Cleans out old mortar between bricks or masonry for repointing.





**Engineering  
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Production  
"know-how"**

**..applied to wear-resistant  
AMPCO METAL  
..makes Ampco your ideal  
source for bronze parts**

Only from Ampco  
can you get all of  
these services and  
benefits:

- 1** Distinctive properties of resistance to wear, impact, fatigue, corrosion.
- 2** A series of engineered alloys — with physical properties to fit your application.
- 3** Quality control to hold these properties within narrow limits.
- 4** Diversified production facilities — coordinating in one place all the commonly used metal-working processes.
- 5** Engineering and production "know-how" to give you a practical manufacturing program.
- 6** A nation-wide organization of field engineers to assist you.
- 7** A record of proved performance in hundreds of leading makes of equipment.
- 8** A national reputation that makes Ampco Metal parts a sales asset.

The basic properties of this series of aluminum bronze alloys—their unique resistance to wear, impact, fatigue, and corrosion — are just the beginning of a successful application. It is equally important to select the correct grade for your purpose, and to design your part for practical production.

In this important aspect of service, the Ampco organization is pre-eminent. The Ampco engineering and laboratory divisions are large, competent groups — able to contribute significant ideas and suggestions, within the framework of your general design program and the operating conditions of your equipment.

It pays to consult Ampco at an early stage in your design problem. Send us your prints for helpful suggestions, or ask for technical bulletins. Address Dept. BW-4.



Specialists in engineering, production, finishing of copper-base alloy parts.

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Milwaukee 4, Wis.  
Ampco Field Offices  
in Principal Cities

A-11

## Wanted: Civilian Trucks

Barking close on WPB Chairman J. A. Krug's heels, the Office of Defense Transportation has announced an ambitious program calling on WPB for manufacture of 1,063,000 trucks in 1946. This would be a record for civilian use.

• In the current discussion of preparatory steps to reconversion of the automobile industry (page 15) little has been said about production of commercial vehicles, but J. Monroe Johnson, ODT director, never sleeps at the wheel.

Truck manufacturers, as a group, don't face the tough reconversion problems that passenger car makers do, because they have made trucks right through the war. Their difficulty is more likely to be continued heavy military demand for trucks.

• In addition to trucks, ODT's program also includes 50,000 truck-trailers, 250,000 truck and trailer bodies, and 6,000 attachment third axles. The truck program includes 552,000 light, 444,000 medium, 55,000 light-heavy, and 12,000 heavy-heavy trucks. The truck-trailer program includes 41,000 general freight and 9,000 special type truck-trailers.

four central northwest states, from 1940 to 1944, increased wheat output 45%, corn 73%, oats 24%, eggs 89%, cattle 30%, hogs 70%, chickens 51%.

All these products—and more—funnel through the Twin Cities en route to the nation's consuming markets and into military and lend-lease channels.

• **Farm Income Gains**—Effect of the expansion in farm output has been to more than double northwest farmers' cash income—from \$911,000,000 in 1940 to \$2,000,000,000 in 1944. Comparatively, net salaries and wages in the region rose from \$1,200,000,000 to \$2,200,000,000. Cash income per farm soared from \$2,006 four years ago to a current \$5,508—40% above the national average.

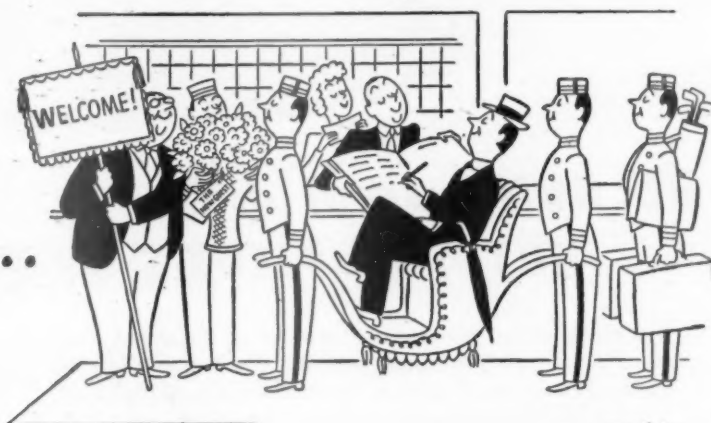
Farmers have used this money to cut their mortgage debt nearly 15% in those four years. Average bank deposits over the district have risen 125% since mid-1939, against a national rise of 90%. And as a further indicator of savings, "E" bond sales in the past four years have kept pace with the national average.

• **Easier Adjustment**—It is statistics of this sort which—until the recent pinch began to be felt—led economists and businessmen of the region to say, "We may be the section the war boom forgot."

**We're sorry it ever  
came to this...**



**and it may never  
come to this, but...**



**The** wartime handicaps now facing us in the Hotel Pennsylvania in New York haven't affected our plans for that future day when Hotel Pennsylvania guests can request and receive the exact type of accommodations they require.

Plus the full range of services and conveniences that make the Hotel Pennsylvania the kind of place you enjoy stopping at.

Of course, even today, your stay at the Hotel Pennsylvania is a remarkably comfortable one, in spite of wartime problems.

You can always count on the pleasant atmosphere of our comfortable rooms with their famous Statler beds.

After the war, all of us who serve you in the Hotel Pennsylvania will be able to make your stay even more enjoyable.

Meanwhile, we will appreciate your continued patience and thoughtfulness.



**YOUR DOLLARS ARE URGENTLY  
NEEDED FOR U. S. WAR BONDS**



## THE GUN'S IN A JAM— BUT THE PILOT'S NOT!

● A machine gun jammed in the midst of a dogfight could mean disaster for plane and pilot. But the danger is quickly and easily averted. A push on a button—or a pull on a handle—sends the Kidde Pneumatic Gun Charger into action. In less than a second, the jam is cleared!

This unusual device—developed by the engineers of Walter Kidde & Company, Inc.—is energized by compressed air or carbon dioxide, or by the plane's regular hydraulic system. It is light in weight—can be operated by manual or solenoid control valves—and is built in models for 50-caliber machine guns and 20-mm. cannons.

Interested manufacturers are invited to write for installation details of the Kidde Pneumatic Gun Charger—an outstanding development in the list of Kidde-engineered devices for successful combat, as well as for safer flight. Application data on request.

The word "Kidde" and the Kidde seal are trade-marks of Walter Kidde & Company, Inc.

Gases-under-pressure, harnessed by Walter Kidde & Company, are serving our fighting men in many ingenious ways. After the war they'll serve you. Look for them!



Walter Kidde & Company, Inc., 140 Cedar St., New York 6, N. Y.

but our postwar industrial readjustment are going to be lessened correspondingly, too." Agriculturally, it is anticipated the expansion of production will create a more serious problem.

Finally, the Central Northwest contributed 10% of its population to war industries in other parts of the nation. That 10% is "net migration," which makes allowances for both military inductions and population increases since the 1940 census.

Actual population loss for the district since 1940 has been 12.5%, for the counties comprising the Minneapolis-St. Paul metropolitan area 2.4%. (Of three other metropolitan areas of more than 750,000 population show general declines: New York, Boston, and Pittsburgh.)

• **Contracts Expand**—With its military manpower thus depleted, with its tertiary rural areas drained of workers, Minneapolis-St. Paul today face an acute labor shortage—for, belatedly, the federal government has poured millions of dollars of new contracts into the cities to help meet the rising demand for bullets and shells and powder.

Now a No. 1 labor area under War Relocation Administration directive, the two cities need 4,000 more workers for ordnance production.

• **There Are Steaks**—Thus, four years after the war's outbreak, the Twin Cities finally are feeling their first real pinch for lack of manpower. But their residents still can enjoy an occasional steak. And those possessing the ration points still can buy butter at the corner grocery.

## CIRCUS TERMS LIGHTENED

In Hartford last week a Connecticut judge lightened the sentences of five executives of Ringling Bros. and Barnum & Bailey Circus who were blamed for the disastrous fire of last July (B—Apr. 7'45, p. 24). But only in the case of Davis W. Blanchfield, wagon boss, was the sentence suspended. The others were "impressed" by the fact that Blanchfield alone admitted that he wasn't indispensable to the circus.

The sentences of James A. Hake, vice-president, George W. Smith, general manager, Leonard Aylesworth, business manager, and Leonard Aylesworth, canvasman, were revised so that they would be eligible for release in eight months and 20 days. One-year sentences for the head electrician and boss salesman were not changed.

Smith and Aylesworth obtained stay orders that will allow them to handle the June 1 opening under canvas in Washington before reporting to the state prison at Wethersfield. In New York circus headquarters "hoped" that the big show would be able to make its summer tour.





# "FACT-POWER" guides FREEMAN SHOE salesmen to BETTER SALES

If you wanted to be America's best exclusive manufacturer of men's shoes... or any other product... your salesmen's every step would need to produce maximum results.

That's how the Freeman Shoe Company of Beloit, Wisconsin, maintains leadership, using the "Fact-Power" Kardex with Graph-A-Matic signal control to summarize and chart sales as they occur.

Executive interpretation and correc-

tive action are simple, fast, accurate.

A sales analysis and distribution control record brings all facts about each customer's activities into one place, calling immediate attention to weaknesses in individual lines.

Territorial records reveal each salesman's performance against established averages, simplifying analysis and guidance.

"Kardex tells us everything," say Freeman officials, "...it even facili-

tates our shoe allotments to dealers in compliance with war regulations."

We'd like to help you develop sales controls as effective as these. Just call our nearest Branch Office.

## THE FREEMAN SHOE CORPORATION

and other leading companies use the record controls shown in "Graph-A-Matic Control for Sales Management." Ask for this important new 96-page book today—free.



SYSTEMS DIVISION

# REMINGTON RAND

Buffalo 5, New York

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# PRODUCTION

## Cloth That Glows

Photoluminescent fabrics provide high visibility for armed forces' signals. Cellulose acetate satin is used as base material.

A spectacular discovery in the field of textile chemistry is contributing to Allied victories by perfecting signal communication between ground and air forces and between aircraft carriers and their pilots.

• **For Signal Devices**—Recent lifting of military secrecy on this development explains the consumption of what had seemed to be fantastic quantities of a "luxury" fabric, cellulose acetate satin. Millions of yards of it are being fabricated into photoluminescent signal devices having a remarkable ability to convert ultraviolet and other high-frequency radiations from the sun into lower-frequency energy, emitted as colored light with resulting high visibility.

The impregnant which gives this property to acetate rayon is one of several new developments in the field of photoluminescence made by Switzer Bros., Cleveland research chemists. It is being manufactured under license by the Conti-glo Division of the Continental Lithograph Corp., Cleveland, a subsidiary of Warner Bros. Pictures, Inc.

• **Patterns for Code**—In the first stages of the war, Allied ground forces identified themselves to their air forces by forming code patterns on the ground

with cloth panels. Early in the African campaign, these were found dangerously inadequate. Pilots of bombing craft were forced to descend to low altitudes to distinguish their own units, thereby becoming vulnerable to enemy anti-aircraft fire. The result was occasional bombing of friendly ground units.

The urgency of the problem led to a call for the Air-Ground Identification Conference at Fort Benning, Ga., in 1942. Conti-glo "daylight fluorescent" fabrics, with which the armed services had made some experiments, were tested in competition with ordinary colored panels, colored smokes, lights, pyrotechnics, and other daytime signaling means.

It was found that Conti-glo's neon red and arc yellow, on panels 2½ x 12 ft., could be distinguished at surprising altitudes, and enable pilots to identify their own ground forces before they had commenced their dive and been committed to the release of their bombs.

• **Better Than Bunting**—Extensive battle testing has established that the light-transforming fabrics have a visibility under some adverse lighting conditions in excess of four times that of the nearest corresponding hue in ordinary signal fabrics.

A common orange bunting of the type long used for distress signaling appears orange because it reflects only the orange portion of the sun's rays, absorbing and thereby wasting all the rest. Conti-glo's photoluminescent fire orange reflects similarly, but also converts much of the sun's ultraviolet, violet, blue, and green into orange. In daytime, therefore, the light-transforming fabric directs several times as much light to

the eye of the observer, and thus remains visible at distances far beyond the range of common orange bunting.

• **Effective in Poor Light**—A particular military value lies in the fact that photoluminescent fabrics become particularly effective at dawn and dusk, when the sky is obscured. This is due to the relative predominance in such periods of the shorter-wave radiations toward the violet end of the spectrum.

When the Switzer brothers undertook research on photoluminescent colors at the request of the Quartermaster General, with the cooperation of Continental Lithograph and Columbus Coast Fabrics Corp., they brought experience in the field dating from student days at the University of California. In the early 1930's, they were mixing fluorescent paints in their mother's kitchen. Later developed materials first used for stage costumes and scenery.

A subsequent application was photoluminescent laundry marking inks. Another is Conti-glo's formula S-195, powder used extensively in crime detection (BW—Feb. 17 '45, p. 64).

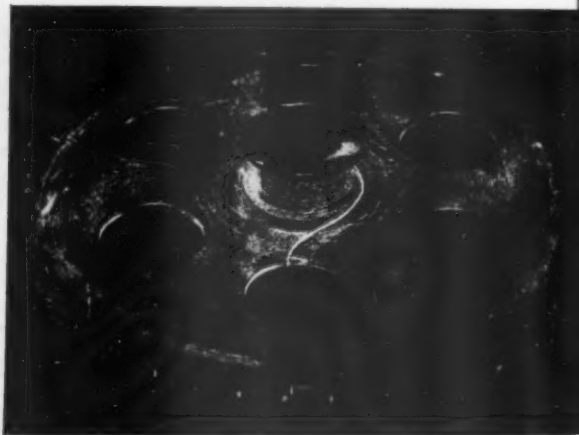
• **Used for Testing**—More recent developments of major importance, being marketed by the Magnaflux Corp. of Chicago under Switzer patents, are Zygo and Magnaglo. They represent two methods of using fluorescence in nondestructive testing of manufactured articles for inherent defects.

Zygo is a fluorescent penetrant in which aluminum, magnesium, stainless steels, plastics, glass, or ceramics pieces are dipped for testing. An oil base carries the fluorescent material into cracks or other open defects. Examined under black light, after the surface washing cracks so small as to be normally invisible will be marked by a bright fluorescent line.

The method is in wide use on such



Dipped in Zygo, a fluorescent penetrant, an aluminum casting (left) reveals "invisible" defects when viewed under black light; a magnetized steel gear washed with



Magnaglo, another fluorescent testing substance, shows a dangerous crack. Both methods are contributing toward the safety of war equipment as well as saving labor costs.

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convergent problems as the inspection of  
most aluminum cylinder heads and  
large crankcase sections. The vacuum  
industry is using fluorescent pene-  
trants to detect seamy lead-in tungsten  
rod, and to find leaks through glass seals.  
Detection of invisible cracks in carbide-  
tipped cutting tools is saving valuable  
materials and machine time.

**Particles Reveal Defects**—The Mag-  
netic inspection method involved mag-  
netizing the part, and flowing over it the  
paramagnetic fluorescent particles in a  
min oil suspension. Any discontinuity  
at or near the surface results in local  
magnetic poles which hold particles at  
the defect. The pattern of the fluo-  
rescent particles under black light de-  
scribes the defect.

The various photoluminescent mate-  
rials employed in these processes are  
complex organic compounds, having a  
common molecular nucleus. They have  
no chemical kinship with such inorganic  
fluorescent or phosphorescent materials  
as the radio-active salts, or the inorganic  
materials employed for such purposes as  
coating the screens of fluoroscopes.

Daylight-transforming fabrics become  
"fatigued" under long-continued ex-  
posure to direct sunlight. Since they  
gradually whiten, however, their ef-  
fectiveness is always at least equivalent  
to a white fabric. The four colors neon  
red, fire orange, arc yellow, and saturn  
green are stable under sunlight in that  
order. The panels are lacquer-coated and  
cleaned by wiping.

**Night Use Is Successful**—The ability  
of these textiles to convert invisible ul-  
traviolet light into visible colored light  
has been used with great success in  
night signaling operations. In such uses  
it is desired to cause only the signal de-  
vice to become visible in the darkness,  
and to use no spotlight or floodlight  
which might be visible to the enemy.

Here the fabrics are used with an un-  
seen source of invisible ultraviolet of  
controlled intensity, and become visible  
amid the dark surroundings by virtue of  
a brilliant internal glow.

The landing officer's signal stations  
on the newer aircraft carriers are  
equipped with ultraviolet units, arranged  
for the activation at night of his photo-  
luminescent uniform and paddles. Then  
these fabrics, brilliantly visible through  
haze or at dawn and dusk, become a  
fiery animated target in darkness toward  
which the approaching pilot aims his  
ship.

Volunteer comment from carrier of-  
ficers has been enthusiastic.

**Acetate Fabric Base**—The entire proj-  
ect was kept secret until last year, pos-  
sibly until capture by the enemy of  
some of the signal panels. At that time  
the Celanese Corp. told of the discovery  
and the use of its cellulose acetate fab-



"HIS DAD WAS RIGHT—  
KELLYS CAN TAKE IT!"

## KELLYS ARE TOUGH!

Dad was right—because tough, dependable Kelly Truck Tires have been "taking it" for over half a century. Today, Kelly's expanded facilities and modern equipment must be devoted largely to meeting the urgent requirements of our armed forces, so the supply of Kellys for civilian use is limited. But when you're eligible, get the new Kelly. It's rugged—Kelly-Dependable!

THE KELLY-SPRINGFIELD TIRE COMPANY  
Cumberland, Maryland

# KELLY

## TRUCK TIRES

Proved and Improved for Over Half a Century





## Speed Sweep WITH A BACK OF STEEL



### Makes Light Work Out of Tough Sweeping Jobs

Steel back of Speed Sweep brushes is the basis of unique construction for faster, easier, better sweeping. Block is  $\frac{1}{2}$  usual size—easier to handle. Tufts of longer, better fibres are more compact—provide "spring and snap" action. Handle instantly adjustable to height of sweeper—reduces fatigue and strain. Speed Sweep brushes are built to outlast ordinary brushes 3 to 1.

#### FULLY GUARANTEED

Since Pearl Harbor Speed Sweep brushes have proved their superiority in many thousands of factories under varied conditions. They are unconditionally guaranteed to meet your requirements. Prompt shipment on AA-5 or higher priority rating. Write for styles, sizes, and prices today.



## SCHIELM



### DeLuxe Mobile Equipment

For 40 years we've been producing highest quality coaches and truck bodies for nationally prominent companies and organizations . . . coast-to-coast. Our engineering know-how and manufacturing experience are at your call . . . time is NOW to consult us about your post war needs for

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**SCHIELM BROTHERS, INC.** EAST PEORIA, ILLINOIS

**OVER 80% OF ALL  
AIRCRAFT INSTRUMENTS  
AND ENGINES ARE  
TESTED WITH  
MERIAM MANOMETERS**

★ What is your measuring problem?  
Ask for Catalog C-10.

**THE MERIAM INSTRUMENT CO.**

10932 Madison Ave. • Cleveland 2, Ohio

ric, Celanese, as a successful commercial base fabric for the photoluminescent impregnants.

The few textile producers who have been aware of the project have been amazed at the large consumption of but one base fabric of a single, relatively fragile weave.

The reason is that in their early research the Switzer brothers discovered that daylight luminescence resulted only when the impregnants (completely lacking in light-converting properties in their crystalline state) were dispersed throughout a filament capable of acting as a "solvent" for them, and continuing to hold them in a peculiar "solvated" state of molecular dispersion somewhat akin to liquid solution.

Cellulose acetate alone among commercially available fabrics showed a capacity for permanently retaining the impregnants in this "solvated" state.

• **Other Weaves Tried**—The first light-transforming fabric offered was the comparatively delicate satin, and it remains the only weave in specifications for the airground signal panels. Other Allied forces, following the U. S. lead in using photoluminescent fabrics for signaling, have adopted a cellulose acetate of a more rugged weave, supplied by a Canadian licensee of Switzer Bros.

### RUBBER FIRMS PREPARE

Two major rubber companies last week began putting their corporate houses in order in preparation for postwar operations.

B. F. Goodrich Co. set up its chemical division as a separate corporation, B. F. Goodrich Chemical Co., presumably to place it in a better position to capitalize on postwar markets. Chiefly a matter of internal organization, the move places in the hands of the subsidiary the same operations it formerly handled as a division. These include manufacture and sale of geon vinyl resins (best known of these bears the trade name Koroseal in fabricated form), organic chemicals used in rubber compounding, and synthetic and reclaim rubbers.

Goodrich Chemical will continue to operate GR-S synthetic rubber plants for the government at Port Neches and Borger, Tex., and at Louisville. Offices and laboratories are in Cleveland. William S. Richardson is president.

Firestone Tire & Rubber Co. will take its subsidiary, Firestone Aircraft Co., out of the manufacture of military aircraft, air frames, and air frame components after the war. It will continue to produce specialized parts, such as aircraft tires and tubes, wheels, brakes, and rubberized parts. It also will build up dealer franchises at airports (BW—

Sep.30'44,p87). Gratiotously, Firestone suggested that "others in our position" also get out of aircraft manufacturing—a suggestion that appears destined to fall on deaf ears at Goodyear Tire & Rubber Co., whose interest in this field extends back to the World War, when it manufactured lighter-than-air craft.

## Significant Shells

Plant for manufacture of armor-piercing cores may usher in far-reaching developments in the reduction of tungsten ore.

Current plans for the new \$6,000,000 Army Ordnance plant at Natrium, W. Va., include a detail that adds unusual postwar business significance to an otherwise purely military project. The plant, which will be operated by Carbonyl Co., Inc., Detroit, in the manufacture of tungsten-carbide cores for armor-piercing shells, is going to have the "largest tungsten ore reducing plant in the world," capable of processing every known type of tungsten-bearing mineral.

• **What It Could Mean**—If the smelter proves to be considerably more efficient than its predecessors, as its planners



Inside the aluminum body of the Army's new antitank projectile (left) is an armor-piercing core of hard, heavy tungsten carbide (right) that goes through the lighter metal and into any enemy tank in its lethal way.

# A Fleet operator reports on Magnesium



**W. D. COCHRAN**  
**FREIGHT LINES**

Aluminum Company of America,  
735 N. Water Street,  
Milwaukee, Wisc.

IRON MOUNTAIN  
MICHIGAN  
Home Office  
PHONES-597-598

December 26, 1944

Attention: Mr. W. R. Butler

Dear Sir:

This afternoon I had occasion to inspect one of the light weight semi-trailers and I thought you would be interested in knowing the condition of the trailers at this time. I have had to operate these trailers under conditions that would emphasize any defects in the material or workmanship, if any existed.

In the manufacture of these semi-trailers, we used mostly aluminum and magnesium alloys only in the top rails that extend along the side of the body and also the roof cross pieces. I was particularly interested in checking these to find out if there was any corrosion. I checked all very carefully and found no corrosion of any kind.

In no place did the material tear, either where riveted to the side corrugated sheets or to the roof cross pieces. I have always been skeptical about the ability of magnesium to carry the stress at the point of riveting and was very pleased to find that it did not tear.

I believe that the manufacturer properly.

was removed

Asphalt pavement

worry about corrosion. The magnesium alloy to see that all grease magnesium.

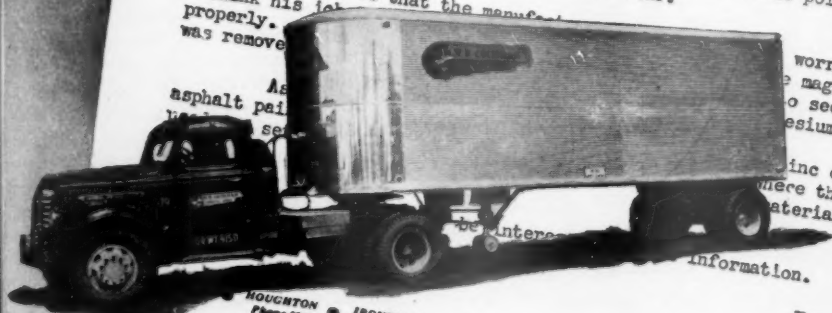
fine chromate and where the chemicals material. None was

information.

Very truly yours,

W. D. COCHRAN FREIGHT LINES,

By *Bill Cochran*  
SPECIALIST IN



NDC:MM

HOUGHTON  
Phone 300

IRONWOOD  
Phone 000

ISHPEMING  
Phone 150

IRON RIVER  
Phone 787

MAGNESIUM



PRODUCTS

**AMERICAN MAGNESIUM**  
**CORPORATION**

SUBSIDIARY OF ALUMINUM COMPANY OF AMERICA

# WELSBACH ENGINEERING and MANAGEMENT CORPORATION

*All phases of*  
**GAS and ELECTRIC  
UTILITY**  
**MANAGEMENT  
CONSTRUCTION  
APPRAISAL**



1500 WALNUT ST.  
PHILADELPHIA 2, PA.

hope and believe it will be, it should be able to produce metallic tungsten at reduced costs and could conceivably lead the way to stabilizing, if not lowering, prices for electric, electronic, and mechanical components in the products of a good many industries.

If the pound price of tungsten carbide, a major outlet for the metal, can continue its 15-year descent beyond the spectacular reduction from \$453 to \$16 already recorded (BW-Dec. 2'44, p52), then employment of the superhard material in cutting tools and as hard-facing for drawing dies will be accelerated.

Cheaper tungsten might also help to hold the line against high postwar prices by facilitating somewhat lower costs for the electrodes in radio tubes, welders, and other widely used electronic equipment, and for the filaments in fluorescent and incandescent lamps.

• **An Expanding Program**—When the new ore-to-core plant gets into operation later in the year, it will augment a production of tungsten-carbide cores for antitank ammunition which has already been multiplied several times since Carboly undertook their manufacture in July of last year. Meanwhile, the present Detroit facilities are being expanded. Fortunately the tungsten ore for the entire operation has been provided.

Such a core is a projectile within a projectile, since it is centered inside a

housing built mainly of aluminum. Function of the outer body is to streamline the shell, permitting a slender armor-piercing core of the "hard metal yet made by man" to be fired from a gun or larger bore at a high muzzle velocity than that achieved by steel armor-piercing projectile.

• **By Way of Illustration**—One of the new shells designed for a 76-mm. gun, for example, weighs about 9 lb., weighs about one-half its weight concentrated in the core, as compared with 15 lb. of a conventional shell. Muzzle velocity of the carbide projectile is 3,400 ft. per sec.; of the steel projectile, 2,800 per sec.

Since the core is vastly harder and heavier than armor plate, it penetrates German Tiger or Panther tank more easily than a steel core could. Since tungsten carbide is so hard and tough that it does not flatten out on impact, a core is designed to go right through its aluminum windshield, through a protective armor, and to break up after penetration.

• **Pointing With Pride**—Carboly executives feel that their ability to produce shell cores in the quantities already manufactured and currently contemplated has been made possible in large part by several of their company's developments. They are particularly proud of the know-how to produce cores to the Army's weight and size tolerances without grinding. Such an operation would require expensive diamond-impregnated wheels to overcome the hardness of the carbide.

Some time ago they discovered that nickel could replace critical cobalt as binder for carbides that do not have to stand up under condition of red heat found at the tips of metal-cutting tools. More recently they found they could use scrap tungsten carbide in core production after the manner of scrap, or secondary, metals in steel and aluminum production. Now the executives believe they have hit upon still newer compositions that will improve the ballistic qualities of the shells.

## ORE USED AS BALLAST

Ship's ballast is a new use for low grade iron ore mined near Lovelock, Nev., and in the Shasta and Indio districts of California.

The heavy iron oxide, crushed and mixed with cement, is being poured into the bottoms of new freighters built at Los Angeles shipyards, to solidify into permanent ballast.

One company is using a fleet of 50 ton trucks to haul the crushed ore from Eagle Mountain in Riverside County to Indio, from where it is shipped by rail to the Los Angeles harbor.

## Your Molded Product is Marked With These Qualities

IF IT BEARS THIS  
"TRADE MARK"



— ADEQUATE MECHANICAL STRENGTH  
— DIMENSIONAL ACCURACY  
— ABSENCE OF FLOW MARKS  
— UNUSUAL COLOR DEPTH

THESE essential qualities are characteristic of Erie Resistor Plastics because we have experienced engineering talent to insure correct die design, proper molding technique, selection of proper raw materials, and complete equipment and facilities for mechanical and finishing operations.

Our engineering services and facilities on any Plastics Molding are at your disposal, without obligation.

Our new illustrated bulletin contains a comprehensive outline of our experience and facilities. Write for your copy.



*Plastics Division*  
**ERIE RESISTOR CORP., ERIE, PA.**

LONDON, ENGLAND.

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• • • Do More Than Before—Buy EXTRA War Bonds • • •





## BUILDING a NEW WORLD is a job for STEAM

Steam power faces the biggest rebuilding job within man's knowledge . . . from steam will come the heat and power to make or process most of the products for restoring a war-battered world . . . from steam will come most of the marine and locomotive power to convey these goods to market.

Look confidently then for new opportunities for steam in the post-war world . . . but also expect keener competition from both pre-war rivals and stalwart new-comers—competition that will dictate renewed emphasis on power plant reliability, efficiency, and operating costs.


Power plant engineers will want to be ready in advance with step-by-step plans for urgently needed modernization and expansion of existing facilities. These plans will help speed re-conversion of their own industries . . . hasten action toward fully integrated power services having the high overall efficiency and flexibility that future operations will demand.

Thinking and planning for tomorrow is a job B&W engineers are ready to tackle today, in partnership with power engineers of industry.

It's a logical job for B&W because B&W engineering and products go far beyond the generation of steam, represented by B&W boilers for all purposes . . . on land and sea. B&W also contributes to the efficient application of steam through its design and manufacture of pressure vessels for refineries and synthetic rubber plants . . . of tubes for boilers, locomotives, chemical plants, and other high temperature, high pressure services . . . of specialty refractories for boilers, and industrial heating and processing furnaces . . .

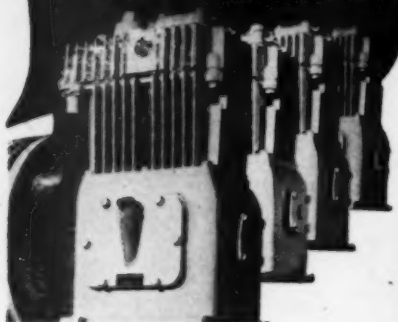
The war must continue to have first call on present power plants and power men. Yet it is not too early now to be looking forward . . . planning tomorrow's action . . . scanning present horizons for the best means to translate today's power plans into tomorrow's power plants.

Water-Tube Boilers, for Stationary Power Plants, for Marine Service . . . Water-Cooled Furnaces . . . Superheaters . . . Economizers . . . Air Heaters . . . Pulverized-Coal Equipment . . . Chain-Grate Stokers . . . Oil, Gas and Multifuel Burners . . . Seamless and Welded Tubes and Pipe . . . Refractories . . . Process Equipment.



**BABCOCK & WILCOX**  
 THE BABCOCK & WILCOX CO.  
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 THE BABCOCK & WILCOX TUBE COMPANY  
 SEAMLESS TUBE DIVISION: BEAVER FALLS, PA.    WELDED TUBE DIVISION: ALLIANCE, OHIO

## SMALLER COMPRESSORS can give you GREATER EFFICIENCY



MANY INDUSTRIAL PLANTS have increased the efficiency of their compressed air supply, by employing a number of *smaller* compressors installed at various points in place of one *large* central unit.

Four excellent reasons for this practice are:

- 1 Individual compressors can be shut down when not required without interrupting air supply or production at other points. A distinct economy.
- 2 Each smaller compressor can be selected for the specific duty it is to perform and can deliver the correct air volume and pressure needed.
- 3 Shorter air lines decrease pipe friction and possibilities for leakage losses in the pipe and air line systems.
- 4 Quincy Compressors' dependability and greater over-all efficiency offer maximum air power at minimum cost. Manufactured in a complete range of sizes from 1 to 80 cu. ft. displacement. Air and water cooled models.

In dealing with any compressed air supply problem, Quincy's quarter-century of experience in manufacturing air compressors *exclusively* is always available. Call a Quincy Specialist while plans are in the early stages.

# Quincy

COMPRESSORS

Quincy Compressor Co.  
Dept. W-20, Quincy, Illinois

Branch Offices: NEW YORK • CHICAGO  
SAN FRANCISCO • ST. LOUIS

## NEW PRODUCTS

### Plastic-Forming Machines

One operator services four to six of the new Automatic Plastic-Forming Machines developed by the Celanese Plastics Corp., 180 Madison Ave., New



York 16, for drawing containers of various shapes at high speeds. Such a battery is said to "produce as many as 200 to 500 pieces per minute" as compared with a production of "3 to 20 pieces per minute per worker" on orthodox "hand or semiautomatic presses." Service consists almost wholly of putting on reels of fresh thermoplastic strip (center) and removing reels of punched strip after blanks have been punched out, heated to drawing consistency, and formed automatically in mating dies.

During the war the machines are making plastic ammunition components for the highly successful M-69 incendiary bomb that is being used with telling effect in air raids on Japan. As soon as materials for their construction are available, the presses will be manufactured and distributed for civilian packaging purposes by the F. L. Smithe Machine Co., 645 W. 44th St., New York. Although the largest container being made on the current model is a round box with a 3-in. diameter and a 3-in. depth, future models are expected to go well beyond such figures to open up new opportunities in transparent packaging. Square or oblong boxes with rounded corners will be as easy to produce as circular ones.

### Skyscraper Smokestack

The new Durabilt Smokestack, designed by the Chicago Fire Brick Co., 1467 Elston Ave., Chicago 22, is built like a skyscraper in that its interior steel structure is used only as a support

for its tile lining of fire brick and outer covering of tile, sheet metal, or Transite asbestos-cement sheet, or other waterproof material. The steel structure is hexagonal in cross-section, as is the completed stack, braced throughout its length to resist wind load, shock, lightning, or earthquake, and equipped with ingenious horizontal and vertical me-

### THINGS TO COME

During the half-century since Roentgen discovered short-wave radiation with its uncanny ability to penetrate solids and make visible their very inwards, the penetrating power of X-ray machines has been mounting year by year. Last year's 1,000,000-v. industrial machines, which photographed any flaws in steel castings 8-in. thick in 15 min., are being superseded by this year's 2,000,000-v. machine, which does the same inspection job in 1 min. flat.

Even greater voltages, hence increased penetrating power and speed, are just around the corner. One big 100,000,000-v. superunit, whose details will be guarded until both wars are won, may make possible motion pictures of the inmost reciprocating and revolving parts of engines, motors, and other mechanisms in action.

• Dry-cleaned eggs can begin to come to market without spot or stain almost any time now as one result of a technique developed in industry for the polishing of metals. All the farmer or egg packer will need is a cloth buffing wheel, a motor to whirl it, and a stick of a special cleaning compound to be applied from time to time to the wheel. A touch of the egg to the buff, and a soiled spot or stain will be gone permanently.

• Few airplanes of the postwar future will be too small for the stability and comfort of a forthcoming automatic gyro pilot. Over-all weight of the outfit including servo units promises to be under 25 lb.; size of the main gyro control box, only 6x6x5 in. Though the price of the pilot is expected to be somewhat less than \$100, its developers believe it will do all that any existing, heavier gyro pilot does.



**"THE HEARST PAPERS are  
opposed to Communism, Fascism  
or any other form of despotism."**

*W R Hearst*  
Publisher

**T**HE above is from an editorial written by William Randolph Hearst on *April 21, 1935*, on the policy of the Hearst papers.

Nine years ago Mr. Hearst saw in that pronouncement on Hearst newspaper policy the twin menaces that hung over the people of the United States.

In Communism he saw the utter destruction of all free enterprise, all personal liberties and the dry-rot of industrial, social and political life.

In Fascism he saw the blood-brother of Communism.

Communism, Fascism and State Socialism of any kind are forms of business, mental and social paralysis.

The Hearst papers continue to oppose all isms that are destructive of the country's free development. They continue to fight vigorously for American institutions and ideals.

And that is why the Hearst papers are good papers for our readers and good papers for our advertisers.

***The* HEARST NEWSPAPERS**





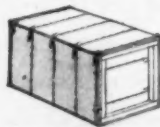
### GENERAL'S "Part of the Product" Plan

GENERAL Engineered Shipping Containers are designed to the product. Frequently the product and the container come off the production line together—as a unit.

Result: You save space, materials, man-hours and packing costs.

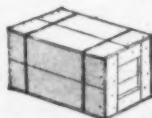
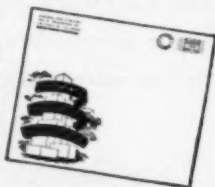


General Corrugated Box



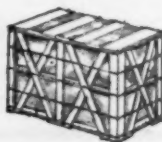
General All-Bound Box

Send for "The General Box"—this booklet illustrates General Box Company's "Part of the Product" Plan.



General Nailed Box

General Cleated Fibreboard Container



General Wirebound Crate

#### ENGINEERED SHIPPING CONTAINERS

### General BOX COMPANY

GENERAL OFFICES: 302 N. Dearborn St., Chicago, Ill.  
DISTRICT OFFICES AND PLANTS: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Sheboygan, Winchendon.  
Continental Box Company, Inc.: Houston, Dallas.

Just a pesky bull pup and his tough old man . . . and how proud he is of junior. You, too, are proud of *your* product. Proud of the constant improvement in workmanship, materials and design. So don't just put it in a box . . . put it in a GENERAL Engineered Shipping Container. There are many good reasons:

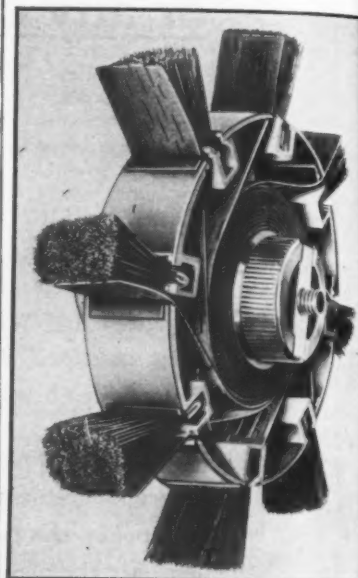
GENERAL boxes are planned specifically to the product, for the product. They're designed to provide positive protection, with minimum weight. They're compact, extra strong and *shipworthy*. They're actually a "Part of the Product."

Our engineers will be glad to help you with your postwar packing problems. Write today for complete information on our free Engineering Service. Let us show you how GENERAL boxes cut costs, conserve materials, save man-hours, and speed production. Remember, if the product deserves your name . . . it also deserves a GENERAL Engineered Shipping Container!

bers to support every tile individual. Between the lining and the steelwork is a special insulating material said to minimize radiation losses and to keep temperatures within the stack uniform thereby increasing efficiency by improving draft. Between the insulation and the outer covering is a ventilating insulating air space with vents located at the stack's bottom and top. Since there is no cumulative load upon lining or covering, their bottom courses can be as light at the bottom as at the top, reducing all-over weight and permitting lighter foundations than are feasible for other heavy-duty stacks. The new structure can be erected in heights to 300 ft.

### Brush-Backed Sander

A photograph of the new Sand-Cor Flex Brush-Backed Sanding Wheel, with cover removed, reveals construction details. Eight small brushes on the periphery support the same number of abrasive strips which are fed as needed.



from a central magazine, or cartridge containing approximately 20 ft. of grit-surfaced material. Since the latter are obtainable in grains of various sizes, the range of the tool is said to run from the finishing of wood products and the deburring of metal parts to the removal of flashings from molded plastics.

Purpose of the brushes is to cushion the abrasive, making it possible to get in and around corners, hollow and fluted surfaces, and into small openings. The sander, which is manufactured by the Exactone Tool & Die Co., 4373 Melrose Ave., Hollywood 27, Calif., comes in one size with an over-all diameter of 8 in., and is designed to fit 1/2-in. and 3/4-in. motor shafts, stationary or flexible.

## Corning Under Financial Lens

Current offering of shares gives public its first good look at affairs of glass works, closely held through four generations marked by epochal elaborations of an ancient art.

For more than four generations, the financial affairs of Corning Glass Works have been strictly a matter of private information. Now, however, the company—closely held throughout the years that have made it one of the most famous establishments of its kind in the world—is giving the public the first inside view of its business structure.

**A Bulb for Edison**—Corning has been turning out most of the glass bulbs made for electric lights ever since a young fellow named Edison came to the concern in 1879 and asked it to blow the bulb for his first lamp. It has perfected glass vessels so sturdy that molten lead can be poured into them while they are sitting on a cake of ice.

It has made spiral glass springs for special purposes that will outlast metal, glass ball bearings that will stand up under pressures that would flatten ordinary materials.

It has played an important part in development of glass fibers, now turned out by an affiliated company whose volume in 1944 exceeded that of the parent, even though Corning's own net sales last year topped \$5,000,000.

**• First Offering of Shares**—Yet, since organization in 1851, the ownership of the company had always been in a few hands until the current offering of 50,000 shares of preferred and a sizable block of common stock. The management has, in fact, been a family affair since the company was founded by the original Amory Houghton, for there has been a Houghton among the officers throughout. A namesake and a great grandson of the founder is the present chairman of the board.

Launched in Massachusetts, the enterprise was moved to Brooklyn a few years later. Then, after a fire, it was transferred to the city of Corning, in New York's "southern tier" of counties, for proximity to Pennsylvania's fuel. This is still the site of the main plant.

**• Accent on Research**—Glass making is one of the world's very old industries, and the basic composition today is pretty much the same as it was 3,000 years ago. Yet Corning, which prides itself on research (its advertising slogan

is "Corning Means Research in Glass"), has in its records upward of 60,000 compositions; about 450 compositions have been sold commercially, with 85 in common use.

The company makes neither containers nor flat glass, specializing in products having particular qualities of chemical stability, electrical resistance, light transmission, and mechanical strength. Important products include bulbs and tubing, laboratory apparatus, and industrial products. Items sold to consumers have included tumblers, lamp shades, and the like since the merger with Macbeth-Evans Glass Co. some 15 years ago.

**• Maker of Pyrex**—The Corning products best known to the public are those sold under the Pyrex trademark. This line, composed at first of ovenware and later expanded to include top-of-

stove utensils such as frying pans and double boilers, grew out of the company's efforts to overcome the lack of elasticity and strength in glass.

Early in this century, Corning had perfected standards of color in railway signals, previously a source of considerable hazard in bad weather operations of the carriers. Next it turned its attention to the roads' problem of signal lanterns. Globes got hot from the flame, broke in snow and rain. The problem was solved with borosilicates.

**• Basic Types of Glass**—The three basic types of glass are made with lime, lead oxide, or boric oxide added to sand and fluxes. Lime is the old-timer for ordinary glass. Lead goes into fine crystal stemware and art glass. Borosilicate is the type that takes punishment.

Corning proved this in 1908 with its lantern globes and began to realize the importance of its discovery shortly afterward when a worker cut the bottom off a battery jar, took it home, and had his wife bake cookies in it.

That was the start of the Pyrex line, merchandising of which began in 1915 and was augmented in the early thirties so that this type of houseware has expanded to about 15% of Corning's business. But Pyrex proved its value in a big way long before it gained public recognition.

**• Laboratory Market**—Within half a dozen years of its discovery, the World

## Insurgents Lose Fight to Control "Katy"

Efforts of a stockholders' committee (BW—Mar. 17 '45, p. 56) to wrest control of the Missouri-Kansas-Texas R.R. (the "Katy") from the management long headed by chairman-president Matthew S. Sloan were defeated



early this week at the final sessions of the road's annual meeting.

The dissenters, led by Marvel D. Adams, Miami (Fla.) bank director (left), and Edward N. Claughton, who (with 11% of the common) is the system's largest single stockholder, demonstrated their strength but failed to achieve their announced objectives. Their program included reduction of the directorate from 15 to nine members, election of five directors, and abolition of the nine-member executive committee that functions when the full board is not in session.

In the showdown, the Adams-Claughton group did prove itself powerful enough to elect two (Adams and Robert D. Saunders of Jackson, Miss.) of the five one-year directors chosen this week.

According to Claughton, this showing was made despite the fact that he and "members of his family and others" were unable to vote some of their stock.

*This is not an Offering Circular. The offer of this Stock is made only by means of the Offering Circular, which should be read prior to any purchase of this Stock.*

## National Bank of Detroit

**Common Stock**  
\$10 Par Value

**Price \$42 a share**

**IN ORDER TO FACILITATE THE DISTRIBUTION OF THE SHARES, MORGAN STANLEY & CO. RESERVES THE RIGHT TO ATTEMPT TO STABILIZE THE PRICE THEREOF BY PURCHASING AND SELLING SHARES, AND RIGHTS TO PURCHASE SHARES, IN THE OPEN MARKET OR OTHERWISE, FOR EITHER LONG OR SHORT ACCOUNT. THIS STATEMENT IS NOT AN ASSURANCE THAT THE PRICE OF THE SHARES WILL BE STABILIZED OR THAT THE STABILIZING, IF COMMENCED, MAY NOT BE DISCONTINUED AT ANY TIME.**

*Copies of the Offering Circular are obtainable from only such of the undersigned as may legally offer this Stock in compliance with the securities laws of the respective States.*

**MORGAN STANLEY & CO.**

**BLYTH & CO., INC. THE FIRST BOSTON CORPORATION**

**GOLDMAN, SACHS & CO.**

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**LAZARD FRERES & CO.**

**LEHMAN BROTHERS**

**MELLON SECURITIES CORPORATION**

**MERRILL LYNCH, PIERCE, FENNER & BEANE**

**PAINE, WEBBER, JACKSON & CURTIS**

**SMITH, BARNEY & CO.**

**FIRST OF MICHIGAN CORPORATION WATLING, LERCHEN & CO.**

**A. G. BECKER & CO.**  
*Incorporated*

*April 5, 1945*

## WHAT 1/2 WILL DO

How much did you spend last year on things that weren't necessary? On things that weren't even much fun? Make a rough estimate.

Then ask us what HALF of that will buy in providing additional protection for your family, additional income for you, yourself, at retirement age.



**The PRUDENTIAL**  
**INSURANCE COMPANY OF AMERICA**

*A mutual life insurance company*

**HOME OFFICE**

**NEWARK, NEW JERSEY**

War broke out. Germany, main supplier of the world's laboratory glass, was cut off. Corning stepped in, took over that market, and never relinquished it.

Since then the company has developed a nearly perfect thermal glass marketed under the name of Vycor. This is 96% fused silica, the remainder 4% being mostly boric oxide. Corning calls it the first strictly new thing in glass making in 2,000 years; it's the one that can stand the molten-metal-ice treatment.

After the ruggedness that could be introduced into glass had been demonstrated, Corning proceeded to astonish everyone with the wide variety of applications. Insulating materials have been perfected that permit higher-temperature operation of motors and other electrical devices; insulating tapes of glass fabric, impregnated with silicone plastics (made of somewhat the same substances as glass), will still further improve motor performance.

• **Allied Enterprises**—When Corning gets into something that's a little outside of its normal field, it turns to others for help. Thus it took its silicones to Dow Chemical, and the Dow Corning Corp. was set up to manufacture them. Pittsburgh Corning Corp. had been established with Pittsburgh Plate Glass Co. in 1937 to make hollow glass building blocks; this company also now makes a porous product tradenamed Foamglas (Corning has a 50% interest in both of these corporations.)

Most spectacular sideline to date, however, is the glass fiber business, jointly owned (48% each) with Owens Illinois Glass Co. This concern, Owens Corning Fiberglas Corp., has two basic types of product: (1) interlaced fibers in a wool-like mass to be fabricated into bars, blankets, and boards for home and commercial insulation (much is now used by the Navy because it is non-flammable), for filters, and for separating mats in storage batteries; and (2) yarns to be woven into tapes, braids, and cloth.

• **Eulalie's Raiment**—Clothing of glass has captured imaginations for many years; the Infanta Eulalie of Spain appeared in the Chicago Exposition of 1893 in a glass outfit—but it itched so much that she appeared for but one day. Owens-Corning recognizes the garment trade's interest in fabrics of glass or of glass mixed with some other fiber. It also appreciates the fireproof advantages of glass in upholstery and draperies. However, it is banking more strongly on industrial uses for Fiberglas than on materials of fashion.

Mass-produced optical glass (BW-May 20'44, p48) to meet war-expanded needs and special glass to supplement



phires as instrument jewels are a  
 ple of Corning's wartime activities  
 though a fairly small part of the 75%  
 its output going to war). In neither  
 does the company see much oppor-  
 tunity for postwar profits.

**Industrial Uses Widen**—Glass is, how-  
 ever, taking an increasingly important  
 place in industries that have to fight  
 corrosion or like their cleanliness to be  
 reliable. One chemical factory, for ex-  
 ample, has 27 miles of glass pipe rang-  
 ing up to 6-in. diameter, and Corning  
 has developed a method of welding glass  
 to facilitate such use. Pumps with glass  
 valves stand up in some cases where  
 stainless steel does not.

But, for all these varied uses, Corn-  
 ing expects bulbs and lamps—particu-  
 larly types such as fluorescents with  
 their long slender tubes—to be among  
 the leading sources of postwar revenue.

**800 Bulbs a Minute**—Most spectacular  
 of Corning's automatic equipment is  
 the "ribbon" machine, thought up by  
 William J. Woods, a blower's  
 helper risen to foreman. This machine,

which went into production in 1926,  
 handles a continuous flow of glass from  
 a melting tank and can produce more  
 than 800 bulbs a minute. There now  
 are a dozen of these machines, of which  
 Corning operates seven and General  
 Electric five. Until recently these  
 twelve could turn out more bulbs than  
 the country could use (including Christ-  
 mas tree ornaments), but Corning now  
 is thinking in terms of expansion be-  
 cause it has discovered that the ribbon  
 machine can be used for making inex-  
 pensive tumblers.

Figures filed with the Securities &  
 Exchange Commission in connection  
 with the Corning stock offerings (prin-  
 cipal underwriters are Harriman Ripley  
 & Co. and Lazard Freres & Co.) reveal  
 that sales have risen from around \$20,-  
 000,000 before the war to \$52,400,000  
 in 1944. Net income, which went as  
 high as \$3,636,800 in 1941, was \$1,992,-  
 491 last year. If the company's equity  
 in undistributed profits of affiliates is  
 added, net for 1944 is raised to almost  
 exactly \$3,000,000 with Owens-Corning  
 Fiberglas showing a net profit of \$2,-  
 144,469 on a \$56,000,000 business.

## RAYTHEON GETS BELMONT

Extensive research facilities of Ray-  
 theon Mfg. Co. with plants at Newton  
 and Waltham, Mass., and large produc-  
 tion capacity of Belmont Radio Corp.,  
 Chicago, were combined last week when  
 stockholders approved Raytheon's ab-  
 sorption of Belmont (BW—Mar. 3 '45,  
 p. 26).

The combination bolsters Raytheon's  
 already strong position in tube and in-  
 dustrial radio production (for armed

*This announcement appears as a matter of record only and is under no circumstances to be construed as an offering of these securities for sale, or as an offer to buy, or as a solicitation of an offer to buy, any of such securities. The offering is made only by the Prospectus.*

NEW ISSUE

**\*75,000 Shares**

## The General Tire & Rubber Company

**4½% Cumulative Preferred Stock**

(Par Value \$100 per Share)

\*Subject to 65,000 of these shares being offered by the Company to holders of its presently outstanding 4½% Cumulative Preferred Stock pursuant to the Exchange Offer described in the Prospectus.

**Price \$105.50 per Share**

and accrued dividends from March 31, 1945

Copies of the Prospectus may be obtained within any State from the undersigned only by persons to whom the undersigned may regularly distribute the Prospectus in such State.

**Kidder, Peabody & Co.**

**Goldman, Sachs & Co.**

**Lehman Brothers**

**The First Boston Corporation**

**Ball, Burge & Kraus**

**The First Cleveland Corporation**

*April 6, 1945.*

*This is under no circumstances to be construed as an offering of these Shares for sale, or as an offer to buy, or as a solicitation of an offer to buy, any of these Shares. The offer is made only by means of the Prospectus.*

**250,000 Shares**

## Anderson, Clayton & Co.

**Common Stock**

(par value \$21.80 a share)

**Price \$44 a Share**

Copies of the Prospectus may be obtained from the undersigned only in States in which the undersigned is legally authorized to act as a dealer in securities and in which such Prospectus may be legally distributed.

**MORGAN STANLEY & CO.**

*April 6, 1945.*

# AMERICA WANTS PROSPERITY

A BOOK to be published early in April by the McGraw-Hill Book Company carries the provocative title "Prosperity: We Can Have It If We Want It." Its authors, Messrs. Shields and Woodward, state in vigorously challenging terms their conviction that the United States will emerge from war with human, material and technological resources adequate to provide a nation-wide standard of living unprecedented in world history. They present, too, their formulation of the several policies and procedures which must be followed by government, business, and labor if we are to realize our potential for a high and sustained prosperity unmarred by prolonged periods of severe unemployment and business stagnation such as have haunted our economic past.

The specific proposals set forth will elicit both enthusiastic acclaim and acrid dissent, for the book deals in far from gentle fashion with many of the currently fashionable panaceas for assuring prosperity by magic formula. It examines, and discards as effective guarantors of prosperity, whatever their individual merits upon other grounds, programs for public works, slum clearance, subsidizing of small business, foreign loans, social insurance, deficit government spending, redistribution of income, the numerous formulae for monetary management, repeal of the anti-trust laws, or any of the loosely-phrased admonitions that government should do nothing and allow everything to take its course untrammelled by controls of any kind.

On the positive side, the book urges clear recognition of the fact that prosperity, under a system of business enterprise, depends primarily upon the existence of competitive incentives that spur capital investment to provide better tools and equipment, that improve organization and technology to insure continuously increasing productivity per man-hour of work, and that enlarge markets by producing what the consumer wants at lower prices to the end that real incomes may be increased.

In short, prosperity depends upon profitable and expanding business and employment opportunity, so it becomes the part of enlightened government, business, agriculture and labor policy to promote those measures which will forward rather than retard the major aim of expanding production.

However great the room for dissent upon the adequacy, or the phrasing, of the specific recommendations it makes, the approach of this book has one virtue of solid merit. It attacks positively the problem of what steps should be taken to achieve and hold prosperity rather than merely devising a poultice to be applied when and if we run into a decline.

Virtually all responsible spokesmen for government, and for business, labor, and agricultural groups, are

agreed upon the goal of prosperity. Moreover, they agree that, insofar as possible, it should be achieved through the effort of private enterprise, with government intervention utilized only as a last resort. Despite this unanimity, almost all public discussion of the problem has concentrated upon the nature, the extent, and the timing of such government expenditures as may be found necessary to combat deflation. Since upon this question there is far from general agreement, our procedure has created an exaggerated sense of divergence in a field in which, so far as fundamentals go, we all are in accord to quite an unusual degree.

★ ★ ★

No confusion should be caused by the fact that the generally current phrase for prosperity is "full employment." The latter phrase merely states the goal in terms of human values, which are good terms in which to state any goal. What matters is that we generally are agreed as to what we mean when we say that we want prosperity or full employment. Not only do we know what we mean, but within very rough limits we can give dimension to our concepts. There are a few whose appraisals are somewhat lower, but most competent estimators set the goals for about 1950 at an average annual employment in civilian jobs of between 55 and 57 million persons, with a gross national product of between \$185 and \$200 billion measured at 1943 price levels. This contrasts with the 1944 level of non-military employed of 51½ million and a gross output for the end of 1944 of over \$200 billion. It assumes a reduction of the average work-week to 40 hours.

It will take some such levels as these to provide employment for those who seek work, with only sufficient "frictional" unemployment (those temporarily listed as unemployed because of the normal turnover between jobs) to afford reasonable labor-market flexibility to both workers and employers. The non-military employment figures are generally consistent with the officially stated postwar goal of jobs for 60 million workers, since the latter figure is generally understood to be an estimate of the labor force, which includes members of the armed services and an allowance for frictional unemployment.

There are a number of reasons why the estimates cannot be figured more closely, and why no one can be very confident even of the validity of the stated limits. The chief points of doubt in the employment estimates relate to how many withdrawals there are likely to be on the part of women, oldsters, and youngsters, who now are in the labor force to a number more than 6 millions beyond normal expectancy; how many men will be retained in the armed forces; and whether the

postwar frictional unemployment should be calculated as approximating the current 1 million or the 3 million listed in the prosperous year of 1929. Additional uncertainties cloud the estimates of gross national product. Notable among them is the fact that no one is sure of the war's effect upon man-hour productivity trends, in view of the fact that half of our current output has consisted of products that had no substantial counterpart in our peacetime price or production series.

★ ★ ★

Nevertheless, despite such qualifications, it is fair to say that we do have a general conception of the magnitude of our postwar goals. Although they are well within our production potentials as demonstrated in this war, they are formidably beyond any previous record of peacetime achievement. Only the most sanguine optimism could lead one to expect that they will be achieved without concerted will, planning, and cooperative effort. Only blind recklessness could engender confidence that once attained they will automatically be held, let alone expanded in normally healthful growth.

If we were to follow past patterns, our war-built boom would, after a period of uncertain length, collapse into disastrous depression. The very magnitude of our recent growth would contribute to the depth and duration of the subsequent trough. Yet a fall even to the level of our previous peacetime-peak-year 1939, has been estimated by The Federal Reserve Board to imply unemployment for between 15 and 20 million persons. If human values have importance, that is something that must not be allowed to occur. If business values have importance, we must not tolerate again such losses as occurred from 1930 to 1933, when sales over the four year period were \$128 billion less than would have been provided if the 1929 level had held, and corporate profits declined from more than \$7 billions in 1929 to an average annual loss of \$1 billion over the next four years. A repetition of these things cannot be tolerated—if foresight and cooperative effort can prevent them.

★ ★ ★

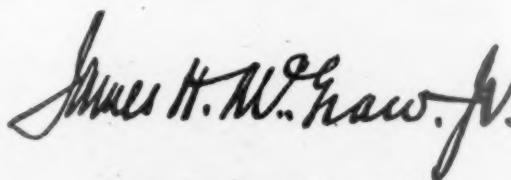
In January of this year Senator Murray introduced in the Senate a bill entitled "The Full Employment Act of 1945." It instructs the President to submit to Congress plans for eliminating both unemployment and inflation, including recommendations for correcting structural defects in the economic system. It provides for a Joint Congressional Committee to consider the proposals of the President, to take testimony from experts and the general public on these proposals or any others it may wish to consider, and after weighing all the facts to submit its findings to Congress. It provides for an advance budgeting of the constituent parts of a full-employment economy, and commits the Federal Government to provide, in advance, for sufficient expenditures (through private contractor channels) to make up for the gap between estimated private expenditures and the amount necessary to assure full employment.

By no stretch of the imagination can The Full Employment Bill, in its present form, be regarded as acceptable to business. Yet it may well present a test of whether or not American business can deal with problems in this area in a statesmanlike fashion. Such statesmanship will consist in demonstrating first, that the Bill is not acceptable because of deficiencies which preclude the possibility of its accomplishing the avowed purposes; and second, that business is able and anxious to offer constructive suggestions for remedying these deficiencies.

It is easy to point to weaknesses in the Bill. To mention only a few of major importance: The proposal to make advance Federal expenditures to compensate for estimated deficiencies in prospective private expenditures is completely impracticable. No one in the country can predict future trends with sufficient accuracy for this purpose; no one can tell what the constituent parts of a really high, stable peacetime budget should be, for in our boom-or-bust economy we have no stable pattern to project; no one can tell, within reasonable limits, how much the government should spend in advance to assure full employment. The Bill pronounces labor's right to work without defining commensurate responsibilities which it should exercise. It does not define the areas of proposed government expenditure in such a way as to allay business fears of government competition or the general public suspicion of leaf raking. Above all, the Murray Bill is defective in that, despite a somewhat vague pronouncement in favor of forwarding private business activity, it recommends a single specific designed to supplement such activity rather than stimulate it.

The very definition of certain of these faults suggests their remedies. But the positive task of stating how the Bill should be amended in order that it may have effective usefulness is far from simple. Yet it is enormously to the advantage of American business to undertake it. Fortunately, there is a representative group sponsored by industry, The Committee for Economic Development, which has for some time been working intensively upon the problem, and which is excellently equipped to offer sound and progressive advice. It should be used for this purpose.

American business cannot afford to take a negative attitude toward legislation in this field. Some legislation undoubtedly will pass, for the problem is one in which there is a grave government responsibility. But equally there is a comparably important responsibility upon all citizen groups. None of them has more to gain or lose from the rise or fall of prosperity than American business.



President, McGraw-Hill Publishing Co., Inc.





## The Double Corrugated Skid-Box ... whose "granddad" was a porch column?



**E**VERY product made at Union Metal is a special design, i.e., it's especially designed to do its job better.

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Working in steel has been our specialty for 38 years and our engineering and designing skills are at your service. Your inquiries will receive considerate attention at The Union Metal Manufacturing Company, Canton 5, Ohio.

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*Craftsmen in Steel Fabrication*

forces since 1941) and puts the company squarely in the home set business with an assured tube supply, something which is rapidly being sewed up by larger radio makers.

Raytheon becomes top company in the new setup. Stockholders approve formation of a new Belmont Radio Corp. to acquire all assets of the Belmont plant. Raytheon will acquire all capital stock of this new corporation in exchange for a new issue of 270,000 shares of Raytheon common stock—\$5 par value—Belmont stockholders will receive 9/10 of a share of this new stock for each share of their old Belmont stock. Both Belmont and Raytheon will retain their identities, under present officers.

Belmont's chief source of tubes was cut off recently when General Electric Co. bought the Ken-Rad tube plant in Owensboro, Ky. (BW—Dec. 30'44, p. 76).

Raytheon probably will add a tube plant in Chicago to supply Belmont, which will devote 80% of its production of home and auto sets to private-label customers.

This would leave Raytheon's eastern tube plants free to expand in industrial radio and research (BW—Mar. 24'45, p. 22).

## Frosty-Edge Issue

Public financing makes its bow in frozen foods distributing industry with offering of shares by Freezer Foods, Inc.

The youthful frozen foods distributing industry last week passed a milestone—its first public financing. Welsh, Davis & Co., Chicago investment securities dealer, is offering 10,000 shares of class A stock, at \$10, in Freezer Foods, Inc. Another 10,000 shares of class A were authorized, but not issued. The class A will be entitled to preferential accumulating dividends of 40¢ a share.

• **Store Transferred**—This new corporation will operate the retail frozen food store in Hubbard Woods (Chicago suburb) which was formerly owned by Deepfreeze Distributors, Inc. (BW—Dec. 30'44, p. 62). Deepfreeze Distributors, Inc., owns all of the 10,000 shares of no par class B stock so far issued by Freezer Foods, Inc. (20,000 have been authorized). This interest is derived from the transfer of the store and certain other assets. Deepfreeze Distributors will henceforth confine itself to wholesaling home freezers made by Deepfreeze Division of Motor Products Corp. But since several of its officers

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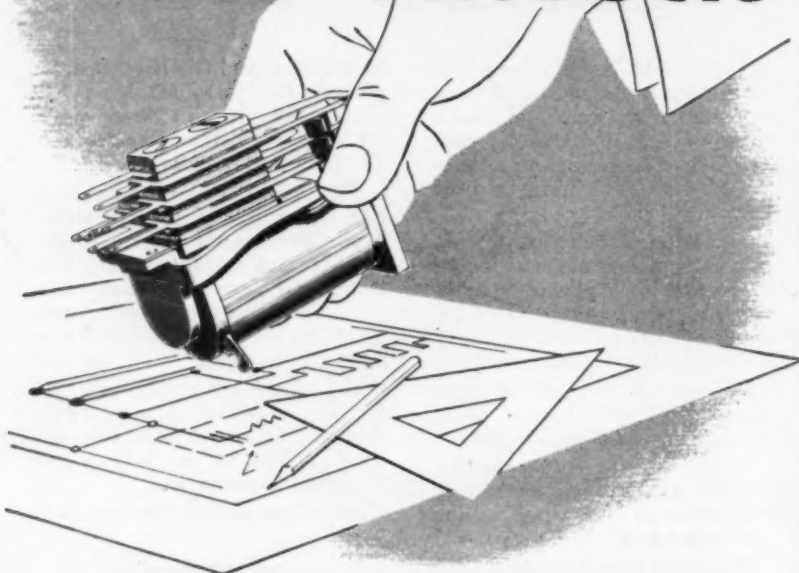
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# CLARE RELAYS

"CUSTOM-BUILT" Multiple Contact Relays for Electrical, Electronic and Industrial Use

## Diesel Program Slashed

Last summer's ambitious plan to make the New York, Ontario & Western Ry. the nation's first all-diesel Class I carrier (BW Aug. 19'44, p. 42) has been abandoned—at least temporarily. Instead of buying the 37 diesel electric units authorized by U. S. District Judge Murray Hulbert, to replace the reorganized road's 88 steam locomotives, the Ontario now intends to order only five, with the hope that savings from their operation will make it possible to buy more units later.

Purchase of the 37 new diesel electric units would have involved expenditure of some \$6,700,000, and the Ontario is reported to have found private financing of such a deal impossible.

• To finance the few new diesel units the road is now buying, \$2,000,000 will be borrowed from the Reconstruction Finance Corp.

are purchasing some of the class A stock offering of the new company, the practical effect will be to give it a controlling interest in Freezer Foods, Inc.

The Hubbard Woods outlet was one of the country's first frozen food specialty shops, and was originally started by Deepfreeze Division as an experimental sideline. Later the store was purchased by Deepfreeze Distributors. Monthly sales volume has grown from \$7,000 in January, 1944, to about \$21,000 now. Most of its customers own home freezers. The store's average order totals \$12.

• Additional Outlets—Four additional stores are planned by Freezer Food Inc., in other Chicago suburbs. A store rented in La Grange last November when V-E day seemed imminent, has since been awaiting WPB's approval of freezing and storage equipment. All five stores will sell several brands of home freezers—including Deepfreeze—as well as an extensive variety of frozen fruits, vegetables, seafood, and meats.

That Freezer Foods, Inc., is no fly-by-night venture is indicated by the roster of its officers. President is William M. Welsh of Welsh, Davis & Co., who is also president of Deepfreeze Distributors, Inc.; chairman of the board is Wetmore Hodges, former president of General Foods Corp. and ex-vice-president of American Radiator Co. Directors include James R. T. Bishop, vice-president of International Minerals & Chemical Corp.; H. Edward Reeves, vice-president of Joyce & Co., Inc.; and Eliot Janeway, economist, and lecturer.



## Equalizing Taxes

High court ruling gives "foreign" insurance companies backing for fight on state tax laws exempting domestic firms.

Last summer the U. S. Supreme Court, in a 4-to-3 decision, upset a 75-year-old precedent by decreeing that insurance is business in interstate commerce and thus subject to provisions of the Sherman antitrust act (BW—Jan. 10, 1944, p. 18). It now appears that the effect of the ruling may not be confined to the insurance industry alone, as seemed likely when it was handed down.

**States Involved**—Despite enactment last month of legislation granting insurance companies immunity until Jan. 1, 1948, from application of the antitrust laws (BW—Mar. 17 '45, p. 63), the Supreme Court decision now shows definite signs of directly affecting financial plans of several state governments.

In recent years state legislatures, intent on new revenue sources, have been finding juicy pickings by levying special taxes on insurance premiums.

This type of tax had become popular with legislators, for they quickly learned that it rarely aroused local protests of consequence and that protection from serious complaints generally could be achieved either by exempting home insurance companies or by assessing them at a lower rate than out-of-state companies.

**New Basis for Protests**—The "foreign" companies obviously haven't liked this discrimination, but there hasn't been much that they could do except register formal protests. However, the Supreme Court's decision that insurance is business in interstate commerce has changed the picture considerably.

As a result, insurance companies are claiming, and seeking to prove in court, that discrimination between local and out-of-state companies has become definitely unconstitutional under federal statutes governing interstate commerce.

**Fight in Michigan**—For example, an important legal battle is developing between the Michigan state government and a group of out-of-state life insurance companies, led by the Prudential Life Insurance Co. of America (one of the Big Five life companies).

For some time Michigan has been collecting a privilege tax, a 3% levy based on premiums paid by Michigan residents to fire insurance companies with headquarters outside the state and a similar 2% levy on premium receipts of "foreign" life and casualty com-



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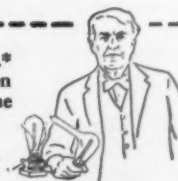
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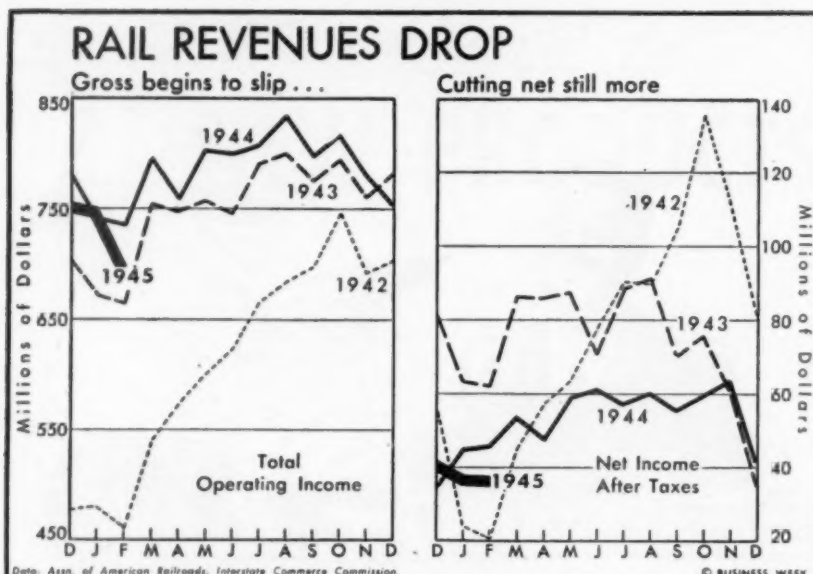
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A combination of rising operating costs and sagging gross revenues has been plaguing the rails lately. In the first two months of 1945, earnings of Class I roads, as a whole, slumped to \$75,000,000, some 17% under levels of a year ago. Regionally, however, the performance varied greatly. The eastern lines, additionally hampered by bad operating conditions last winter, made the worst showing with a 44% drop in January-February net income. Net of southern roads, on the other hand, was off but 13%, and the western carriers actually were able to report profits almost 6% higher than those of 1944.

panies. Michigan does not tax premium receipts of any insurance companies with home offices within its borders.

• **Senate Gets Busy**—Mindful of the widespread discrimination charges, the Michigan Senate's general taxation committee is considering a new insurance premium tax law.

This measure would substitute for the present levies a flat 2% tax on local premium receipts of all insurance companies operating within the state. This new legislation has been stymied by demands of Michigan companies that it be postponed until courts have held the present tax discriminatory and unconstitutional.

• **Payable in Advance**—Under the present law, companies are required to make advance payments each Apr. 1 for the coming twelve months. These payments are based on the amount of premiums the companies received from Michigan residents in the previous year. If the tax payment is not made, the state insurance commissioner is required to suspend operations of the delinquent company.

To prevent possible suspension of its Michigan license, Prudential last month sought an injunction to prevent state interference with its Michigan business pending adjudication of the tax issue. (Earlier the company had notified the

state that it would fight the tax payment this year.) Additional suits were filed, and the state has been enjoined from collecting 1945 taxes from the objecting companies (including \$470,000 from Prudential alone) pending a test of the law's constitutionality.

• **Other States, Too**—Michigan isn't the only state taxing foreign and exempting local insurance companies.

Suits designed to eliminate inequalities are becoming quite common. Prudential and Massachusetts Mutual Life have started litigation in Alabama, where foreign companies are taxed 2½% on premiums collected in that state, compared with about 1% on domestic companies.

Also being challenged in court is the Nebraska law levying a 2% assessment on foreign company premiums and only 4 mills per \$100 on receipts of domestic companies.

• **Oklahoma Takes 4%**—Ohio's tax of 2½% on foreign companies carrying an exemption for domestic insurers is another facing a court test brought by Prudential and other companies. Protests are flooding in about the new Oklahoma 4% tax on all insurance companies, particularly because it gives favored treatment to companies based on the proportion of their assets that are invested in the state.

Some states, however, are passing legislation designed to eliminate discrimination. Oregon, for example, is reducing its old tax from 2½% to 2% and no longer exempting home companies; Iowa hereafter will levy a flat 2% tax on all instead of 2½% on foreign companies and 1% on domestic insurers, and both North Dakota and Tennessee are revising their laws to provide for equality.

Missouri is now taxing all companies 2% instead of exempting home companies; Wisconsin is talking of a flat levy on all companies of 1½% and removal of present discrimination towards "foreigners."

• **Trend Increases**—Maryland is considering eliminating the present tax exemption for domestic fire insurance companies, and Indiana, which now exempts domestic companies from premium taxes, is considering a new law providing for equal taxation for all insurance companies operating in that state.

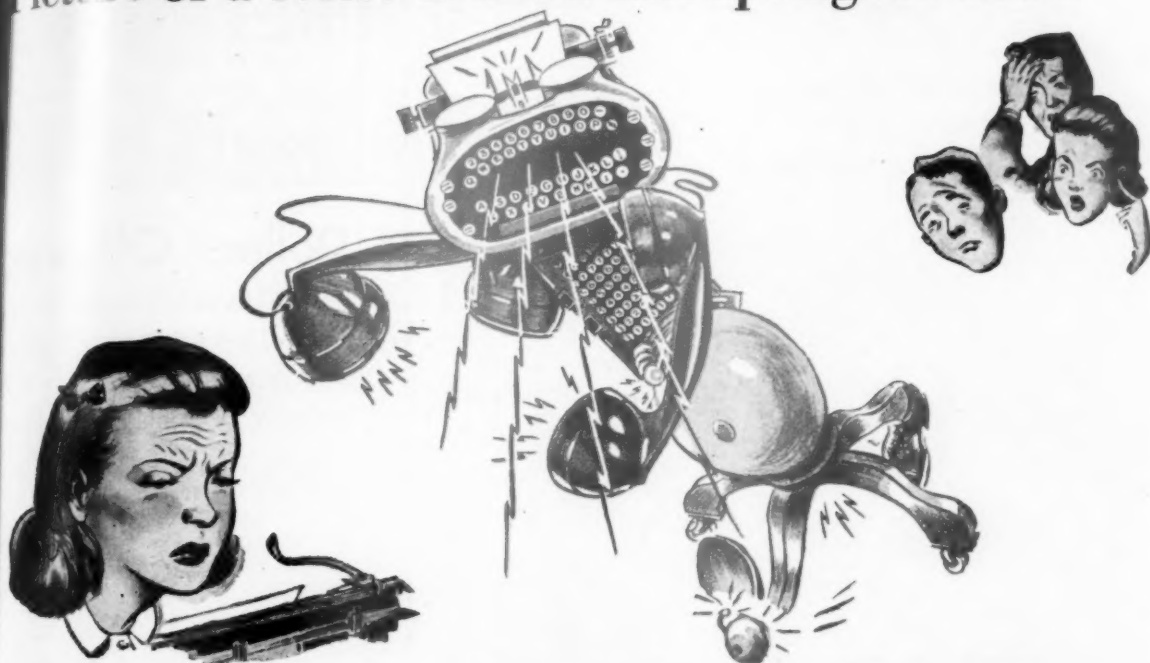
In New England, the same trend is noticeable. Maine's governor recently ordered a special one-day session of the legislature to pass a bill establishing a 2% tax on all premiums collected there by both domestic and foreign companies and removing the previous home-company exemption. New Hampshire also has just removed the exemption for home companies and now levies a 2% tax on premium receipts, after the deduction of dividends to policyholders, of both foreign and domestic insurers.

• **New Jersey Settlement**—Prudential Life, previously threatening to move its home office from New Jersey because of high taxes (BW—Mar. 17'45, p63), has reached an amicable settlement on the tax question. As a result of its negotiations, both domestic and out-of-state insurance companies will pay a 2% tax on premium receipts and a 1% tax on all annuity considerations received from New Jersey residents. Domestic companies will also pay a tax on surplus which will decline gradually until 1952, when the tax will be paid on only half the surplus. This will greatly reduce the burden complained of by Prudential.

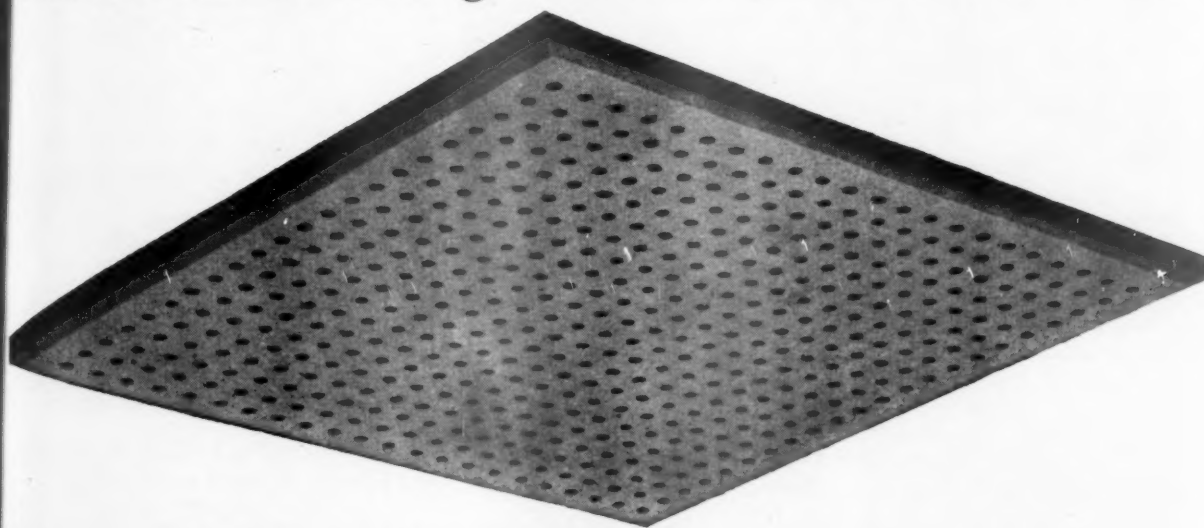
The trend in other states on the discriminatory tax issue is not discernible yet.

• **Biddle's Warning**—A vexing problem is the question of how rates can be set jointly by companies without running afoul of the antitrust laws, as was the case with the Southeastern Underwriters Assn. (BW—Jun. 10'44, p18). Attorney General Francis Biddle has made it plain that the Dept. of Justice "does not favor the enactment of any particular type" of state legislation for the regulation of insurance. Instead, each state,

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he says, must determine itself just what should be left unregulated.

However, Biddle warned that "after Jan. 1, 1948, to the extent that the insurance business is not regulated by state law, the antitrust laws are applicable to prevent monopolies and restraints of trade just as they are applicable to any other business."

## Dollars' Offspring

This year's opening of the "oldest savings account" contest affords another illustration of the potency of compound interest.

Spring appears to be the season for new entries in the never-ending institutional competition for the honor of having the nation's oldest savings account. Such claims have popular appeal as demonstrations of the potency of compound interest.

The 1944 edition of this competition got under way about a year ago when the Middletown (Conn.) Savings Bank thought it had discovered this country's oldest savings account on its ledger. That account had begun with an \$8 deposit in early 1844. Another \$18 was added later that year, but there were no more deposits and no withdrawals in the ensuing century.

• **\$26 Grows to \$2,505.50**—Interest, however, had compounded steadily, and the \$26 by the spring of 1944 had grown to the respectable sum of \$2,505.50. The grandson and namesake of the original depositor now owns the account.

This news stirred New York City's venerable Bank of Savings. It promptly reported an account on its books dating back to a deposit of \$10 in 1819 (the date of its own birth), to which \$5 was added in 1820.

This \$15 had remained undisturbed. By last spring, as a result of interest accumulating at rates varying from 1½% to 5% during the succeeding 125 years, it had grown to \$3,999.99. Artificial respiration appears to have been needed at one time to keep the account going, however, as in 1931 it was assigned to the institution to keep it alive and enable heirs to draw against the balance then outstanding.

• **New Hampshire Contender**—The first entry in the 1945 competition was made last week. The New Hampshire Savings Bank of Concord reported an account dating back to 1841, still carried in the original bank book. In this case, an original deposit of \$5, without additional deposits or withdrawals, has grown to \$443.13.

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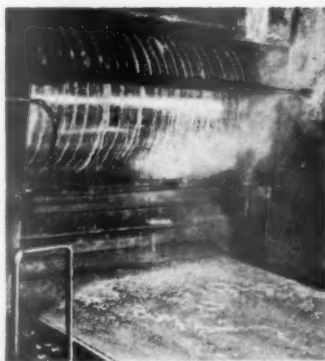
THE world's first aluminum box cars were recently delivered to three railroads: the Rock Island, the Minneapolis and St. Louis, and the Chicago & Alton. They are made from the floor up of the new high-strength aluminum alloys developed by Reynolds.

This new aluminum freight car is lighter than conventional all-steel box cars . . . by 10,000 pounds! It is also corrosion-resistant and has a lower center of gravity.

Result: It means greater payloads, longer life, lowered operating and maintenance costs, and higher speeds for postwar freight trains.

This box car-of-tomorrow is typical of the way aluminum can be used to bring new lightness and efficiency to automobiles, housing, furniture . . . and thousands of other articles in tomorrow's light-metal age. It proves why it pays to . . . Consider Aluminum—Consult Reynolds

Reynolds Metals Company, Louisville 1, Kentucky



Rolling out a sheet of R301, the amazing new aluminum alloy that's so tough it's used for armor plate. It's Reynolds pioneering spirit that has resulted in such metallurgical triumphs as R301.

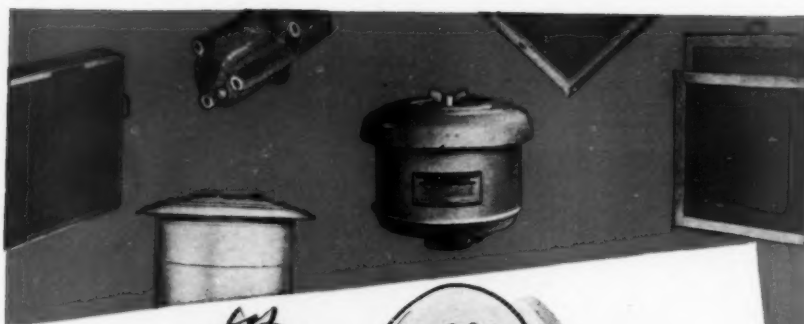


Fabricating aluminum parts at Reynolds own plants. This revolutionary new wartime advance will help lower production costs of railroad cars and many other articles after the war.



# REYNOLDS

# ALUMINUM



## TAKE THE CASE OF A GEAR ... it has to breathe

Elementary? Well, yes, my dear Watson! But if the air a gear case breathes is allowed to bring into it assorted grit and dirt the lubricant eventually becomes a grinding compound. For that very reason Air-Maze engineers developed a breather which cleans air that enters gear cases and other housing of engines, compressors and machinery.

You may never require one of these important gear case breathers, but you can have engineered air filtration in every Air-Maze air filter. So, whether your interest in filters applies to air conditioning, ventilating, compressors, blowers or engines, remember—"if it uses air, use AIR-MAZE".

### AIR-MAZE CORP.

Representatives in Principal Cities. In Canada: Williams & Wilson, Ltd., Montreal, Quebec, Toronto, Windsor; Fleck Bros., Ltd., Vancouver.

For further data on types and application of Air-Maze filters, send for Catalog AGC-144.

IF IT USES AIR...USE

# AIR-MAZE

ENGINEERED AIR FILTRATION

## WAR BUSINESS CHECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation

### Increased Civilian Supply

Knit Goods Program No. 6 for increased production of 33 items of infants' and children's knit goods, men's and boys' heavy weight underwear, men's work socks, and men's and women's utility sweaters has been announced by WPB's Textile, Clothing & Leather Bureau. Under the program, effective during April, May, and June, manufacturers must produce the items at the base period prices (second quarter of 1944 plus any increase allowed since then, and in the same proportion as their base-period production. (Supplement XV to Schedule A, Order M-328B.)

• **Mackinaws and Jackets**—A special WPB program calls for production, during the second and subsequent quarters of 1944, of 9,480,000 mackinaws, pea coats, and canvas jackets for men, boys, and juveniles, to be made of mackinaw cloth, melton-type cloth, or similar fabrics. Of the total fabric available for this program, 60% will be allocated to manufacturers producing in the lower price ranges. Producers may obtain an AA-3 rating for body cloths, linings, and slide fasteners by applying to WPB's Textile, Clothing & Leather Bureau on Form WPB-3732 before Apr. 18.

• **Candy Bars**—Manufacturers of 5¢ candy bars and packages need no longer set aside 35% of their production for the armed forces. Revised military estimates have enabled War Food Administration to cancel WFO 115, as amended, which reduced the set-aside from 50% to 35% (BW-Apr. '45, p.52).

• **Motion Picture Film**—Producers of educational, training, and factual films have been allotted 7,500,000 linear feet of 35 millimeter motion picture film raw stock in the second quarter of 1945, as compared with 5,000,000 ft. allotted in the first quarter for this purpose. In the third quarter WPB indicates that a still larger quantity may be available.

• **Shoe Gabardine**—WPB has announced a program to offset shortages of leather for civilian shoes by increasing production of shoe gabardine. Mills desiring to participate should apply for yarn to WPB's Textile, Clothing & Leather Bureau at Washington.

### Decreased Civilian Supply

Civilians may expect smaller amounts of cultural or printing papers, wrapping paper, paper bags, household towels, napkins, and facial tissues under second-quarter allocations of wood pulp to paper and paperboard mills. Biggest cuts are in allotments for



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paper (40,000 tons less than original quarter allocations) and book paper (40,000 tons). Containerboard quota for the quarter is up 14,000 tons.

**Chlorine**—Against requests for 380,870 tons of chlorine for the second quarter of 1945, WPB has allocated 345,800 tons. According to WPB, the difference between chlorine requested and produced is about 35,000 tons greater than normal, and less capital and civilian demands for the fluid will suffer as a result.

**Collapsible Tubes**—A revision of Order 15 places lead-use restrictions on packers who use collapsible tubes rather than on manufacturers. Except for medicinal items, which the lead quota is unlimited, tubes on a limited basis—are permitted only for pyroxylin and rubber cements, soldering compound, and type-metal flux. Aluminum tubes are allowed for a somewhat smaller list of products.

**Steel Drums and Shipping Pails**—WPB has announced that the critical shortage of sheet steel means a reduced supply of drums and pails for industrial uses during the next few months.

**Beef**—WFA has added another 10% to the current 70% set-aside order covering utility-grade beef for canned meat for the armed forces applying to all packers operating under federal inspection. This increase raises the set-aside of utility-grade beef up to the 80% set-aside of canner and cutter beef. (Amendment 21, WFO 75.2.)

### Maxed Restrictions

With the start of the new 1945-1946 year on Apr. 1, Solid Fuels Administration for War has revoked various winter emergency coal restrictions. Among the canceled orders are the direction prohibiting coal deliveries to consumers with more

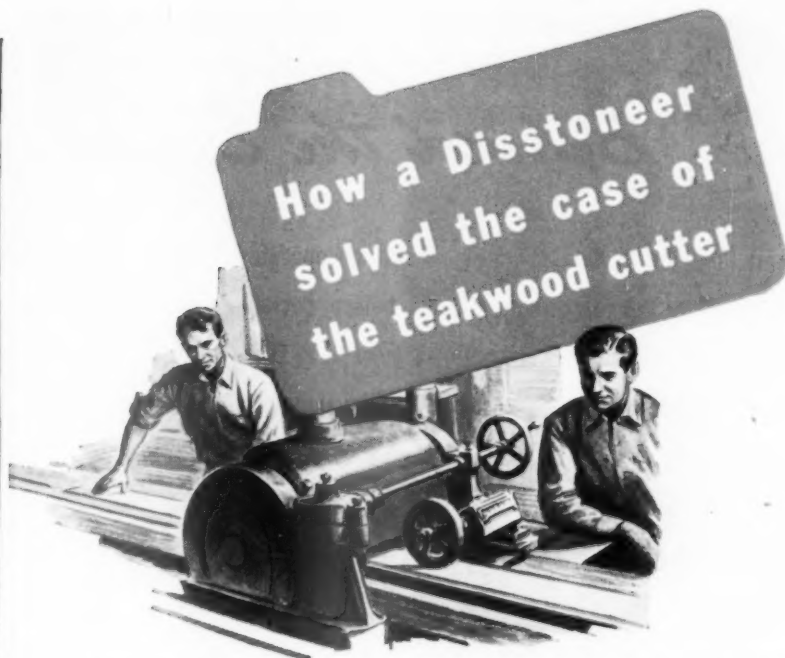


The American Welding & Mfg. Co.  
Warren, Ohio  
Ford Motor Co.  
Ypsilanti, Mich.  
Waldes Koh-I-Noor, Inc.  
Long Island City, N. Y.  
Ward Machine Co.  
Brockton, Mass.

### MARITIME COMMISSION AWARDS

Chicago Pump Co.  
Chicago, Ill.  
General Electric Co.  
Fitchburg, Mass.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)



A manufacturer received an order for tongue and groove flooring made of teakwood, a highly abrasive wood that is difficult to work. High-speed knives were used, but they wore down so fast that regrinding every 15 minutes was necessary. Production between grinds amounted to only 1200 linear feet; and in order to assure satisfactory workmanship, an inspector had to be kept on the job.

The Disstoneer\* called in to study this problem, recommended the use of knives tipped with Carboloy, the "hardest metal made by man." The Carboloy knives ran 20 hours before grinding was needed (80 times as long as the other knives), 100,000 linear feet of flooring was produced, and cutting was so accurate that the inspector was no longer needed.

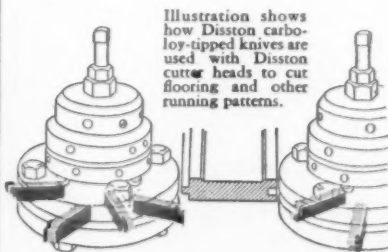


Illustration shows how Disston carbide-tipped knives are used with Disston cutter heads to cut flooring and other running patterns.

### Another clear-cut case of Disston leadership!

### \*DISSTONEER...

a man who combines the leadership and experience of Disston with sound engineering knowledge, to find the right tool for you—to cut metal, to cut wood and other materials—and TO CUT YOUR COST OF PRODUCTION—not only on difficult work, but on simpler jobs as well.



Your cutting problems may be vastly different, but if they have to do with metals, you will be interested in—

### DISSTON METAL CUTTING BAND SAWS



Made of tough, durable Disston steel, in two types: (1) *Hardened Throughout*, for high-speed cutting of thin sheet steel, aluminum, plastics, etc., regular or pullman teeth; and (2) *Hard Edge Flexible Back* for low speeds on all materials adaptable to metal cutting band saws; three different sets—Straight, Raker and Group. Disston Metal Cutting Band Saws are made to fit different makes of machines.

HENRY DISSTON & SONS, INC., 428 Tacony, Philadelphia 35, Pa., U. S. A.



## Behind the Scenes

See how the H & D package laboratory operates "behind the scenes." A typical product, never before packaged in corrugated, enters the laboratory. How H & D Package Engineers proceed with the design, development and testing of an engineered corrugated shipping box is photographically recorded, scene by scene. If you're interested in packaging, you'll want to see this detailed backstage presentation of the H & D package laboratory at work.



### Take a Look at Packaging in Action

• Look at packaging from "behind the scenes." Go along with a Package Engineer while he designs an engineered shipping box. To get a better understanding of the science of package engineering, send for your copy of H & D's book, "Behind the Scenes at the H & D Package Laboratory." Write today.

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AUTHORITY ON PACKAGING

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than five days' supply on hand and prohibiting retail deliveries of certain corn bituminous coals to large consumers with over 15 days' supply on hand.

• **Corn for Alcohol**—Grain distilleries use an unlimited amount of corn grade No. 4 or No. 5 or "sample," when purchased, for the production of industrial alcohol during the entire second quarter 1945. Corn may grade No. 4 or 5 or sample if it has a high moisture content or if it has become heated or moldy. Restrictions on the extent to which distillers may dry corn after purchase are also removed.

• **Freon-12**—Restrictions on the delivery and use of Freon-12 (dichlorodifluoromethane) for air conditioning and certain types of refrigerating systems have been removed. Preference, however, must be given to essential users who are not on List A, WPB Order M-28.

### Tightened Restrictions

WPB's Rubber Bureau expects a saving of 3,000 long tons of natural rubber a year under Amendment 5, Rubber Order R-10, specifying construction changes that will result in the use of more synthetic and natural rubber in certain heavy-duty tires for the armed forces.

• **Amyl Acetate**—To assure an adequate supply of this chemical for penicillin production, WPB has placed amyl alcohol and amyl acetate under allocation control. (Schedule 100, Order M-300.)

• **Paper Containers**—An amended WPB ruling in effect limits the use of hot-dipped cups to industrial plants, hospitals, and certain other minor but essential operations. The quota for use of these cups has been cut from 80% to 75% of average monthly use in the first quarter of 1944. Flat-bottom dishes are subject to a set-aside order reserving 75% of production for the military overseas. Restrictions are also tightened on liquid-tight containers and paper milk containers. (Order L-336, as amended.)

• **Containerboard**—Containerboard producers must accept all basic or WPB certified orders received after the seventh day of each month during the first two months of each quarter, up to at least  $\frac{1}{4}$  of their production in the corresponding quarter of 1944. Until the seventh day of each month producers may seek orders from their established customers. No producer may make any paperboard other than containerboard in any calendar quarter unless the total tonnage of containerboard produced in that quarter is as great as that produced in the corresponding quarter of 1944. (Order M-290, as amended.)

• **Fluid Milk and Cream**—Growing war requirements for all major manufactured dairy products and continued tight supplies of butter, cheese, and evaporated milk for civilian use have made it necessary for WPB to continue limitations on the sale of fluid milk and cream even during the spring and summer months of peak production.

• **Hydroquinone**—Beginning May 1, this chemical, used principally in making syn-

the rubber, as a photographic developer, as an intermediate for gasoline gum in-  
 filters and military smoke-dyes, will be  
 under allocation control. (Schedule 101,  
 PB Order M-300.)

**Asphalt and Tar**—To insure the best pos-  
 sible use of railway tank cars, Office of De-  
 partment of Transportation must approve shipment  
 of asphalt and tar to be used for road sur-  
 facing. (ODT 7-1 Revised 4.)

### Price Control Changes

**Carbon Black**—A further step in encouraging additional  
 carbon black production (BW—Mar. 31 '45,  
 20) is OPA's new pricing provision allow-  
 ing producers higher price ceilings for all  
 grades of channel carbon black made  
 under emergency high-cost conditions and  
 sold to Defense Supplies Corp. DSC will  
 sell the channel carbon black to the rub-  
 ber industry at a flat price based upon the  
 estimated weighted average cost of acquisi-  
 tion (Amendment 3 to Supplementary Regu-  
 lation 14F to Gen. Max.)

**Jet Propulsion Fuel**—Sellers of this fuel,  
 used in the new rocket bombs and jet  
 engines (BW—Feb. 10 '45, p. 16), will be given  
 ceiling prices upon application to OPA in  
 Washington. Jet propulsion fuel is sold only  
 to refineries and only to the armed forces.  
 (Amendment 26, Regulation 88.)

**Imported Swiss Cheese**—OPA has an-  
 nounced specific maximum prices for Swiss  
 cheese imported from Switzerland which, in  
 New York City, are 12¢ per lb. higher than  
 maximum prices for domestic Swiss cheese.  
 Throughout the rest of the country, prices  
 will be a little more than 12¢ higher than  
 domestic cheese prices. (Amendment 23,  
 Revised Regulation 289.)

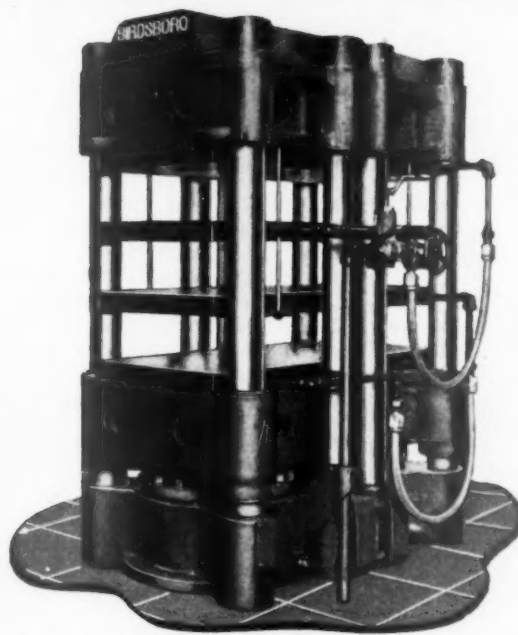
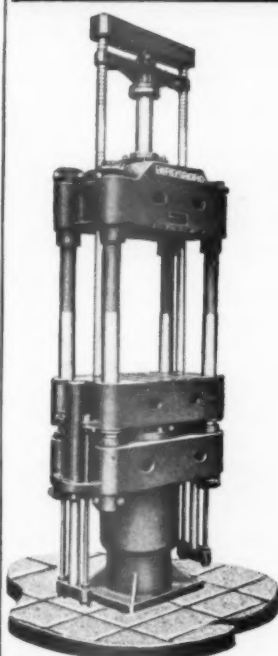
**Dried Eggs**—Egg driers have been noti-  
 fied that offers of dried whole eggs must  
 be made to WFA at a price at least 3¢  
 per lb. less than the ceiling price.

**Wooden Containers**—OPA has established  
 a procedure for obtaining increases in ceiling  
 prices of wooden containers that are still  
 frozen at March, 1942, levels, in cases  
 where the freeze levels are so low as to  
 threaten production and cause the manufac-  
 turer financial hardship. (Amendment 37 to  
 Supplementary Regulation 15 to Gen. Max.)

### Surpluses

Retailers must keep their customary re-  
 cords, and all other resellers must keep speci-  
 fied records, on any sales they make of gov-  
 ernment surplus property for which ceiling  
 prices have been established in special orders.  
 Heretofore, no records have been required  
 in many such orders. The same OPA action  
 establishes ceiling prices on sales by gov-  
 ernment agencies and certain resales for the  
 following items: secondhand electric motors  
 of ½ horsepower or less; primary chromium  
 chemicals, dry batteries, wire, cable and  
 cable accessories—on which ceilings will be  
 those established for sales of these items by  
 other sellers; coal—on which ceilings will be  
 based on acquisition or replacement cost,  
 not on producers' ceiling prices. (Amend-  
 ment 4, Supplementary Order 94.)

## MOLDED PLASTIC PARTS PLASTIC SHEETS, TUBES & RODS



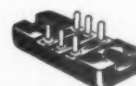
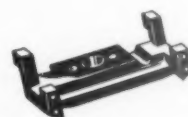
• Compression molding press with  
 overhead cylinder for ejecting and  
 for operating transfer platen, rang-  
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 diameter and up.

• Steam platen presses for laminating work,  
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• Together these two Birdsboro Hydraulic Plastic  
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Consult Birdsboro on your post-war requirements  
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# LABOR

## C.I.O. Faces Test

First major jurisdictional dispute involves much more than U.A.W.'s raid of U.F.E. members. It's a question of ideology.

The C.I.O. was well into its first major test as umpire of jurisdictional disputes this week. The vast United Auto Workers Union (membership: 1,000,000 plus) and the United Farm Equipment & Metal Workers (membership: 72,000 minus) officially marked time in their battle over employees of Caterpillar Tractor and International Harvester as a committee of three appointed by Philip Murray, C.I.O. president, sought to arbitrate a bitter inter-union clash.

- **Earlier Threat Averted**—Once before it looked as if the C.I.O. would have serious jurisdictional troubles—when Harry Bridges' International Longshoremen & Warehousemen and the right-wing United Retail & Wholesale Employees scrapped over New Orleans warehouses—but that situation never lived up to its threatening possibilities (BW—Jul. 1 '44, p98).

John L. Lewis' boast when he was establishing the C.I.O.—that industrial unionism would eliminate jurisdictional problems—is still repeated by the men who succeeded Lewis at the C.I.O.'s controls.

- **Question of Ideology**—Lewis' claim for what industrial unionism would do in eliminating jurisdictional troubles rested on weighty evidence. This showed that craft unions, up against technological development that blurred established craft lines (e.g. the scrap over shipyard welders; page 96), were responsible for almost all of the important interunion wrangles. Clearly, organizations built on vertical rather than horizontal lines wouldn't run into that kind of problem.

But time has shown that there can be other, and perhaps equally important, causes of jurisdictional disputes. Ideology, for example, may be just as much a casus belli as technology in a labor feud. And it is ideology which is the genesis of the current U.A.W.-U.F.E. battle.

- **Left-Wing Leader**—The United Farm Equipment unit is, despite its small size, a leading member of the left-wing bloc in the C.I.O. Joseph Weber, its national director of organization and its

real boss, has long been identified with Communist-approved causes.

It was he who organized the protest march in South Chicago during the Little Steel strike of 1937 which ended up outside the Republic Steel plant as "the Memorial Day Massacre." As far as the war and international politics are concerned the U.F.E.'s policies have closely paralleled the so-called "party line."

Large numbers of U.F.E. members at Caterpillar Tractor's plant in Peoria, Ill., concluded that because of their union's political position it was incapable of representing them adequately. They complained bitterly about U.F.E. "Communist leadership" and lack of interest in members' welfare. And then a committee made contact with the United Auto Workers.

- **"Not a Raid"**—U.A.W.'s two vice-presidents, Walter Reuther and Richard Frankensteen, who head competing factions in their own organization, investigated the Caterpillar situation, then joined hands in a move to take over.

Under the slogan, "This isn't a raid, it's a rescue," U.A.W. representatives began signing up disaffected elements in the Caterpillar plant.

The man whose membership card they accepted first was Harold Davis, president of the U.F.E. local in Peoria who has since become U.A.W.'s field general. After a scrappy week in southern Illinois, the battle spread to Chicago and the big plants of International Harvester, where U.F.E. holds a contract.

- **Petition for Election**—On Mar. 21, counting, to its own satisfaction, majority support in Caterpillar, the U.A.W. petitioned the National Labor Relations Board for a collective bargaining election in the plant. Immediately Murray was deluged with protests from left-wing leaders in the C.I.O.

The next day he appointed a three-man committee to settle the dispute and called for a 30-day truce while the committee made its investigation. U.F.E. is meanwhile "merchandising" a wage increase, the result of 18 months of parleying with Caterpillar management, which came through two weeks before the U.A.W. raids began.

- **Rival Claims**—Actually a real conflict exists between U.A.W.'s and U.F.E.'s

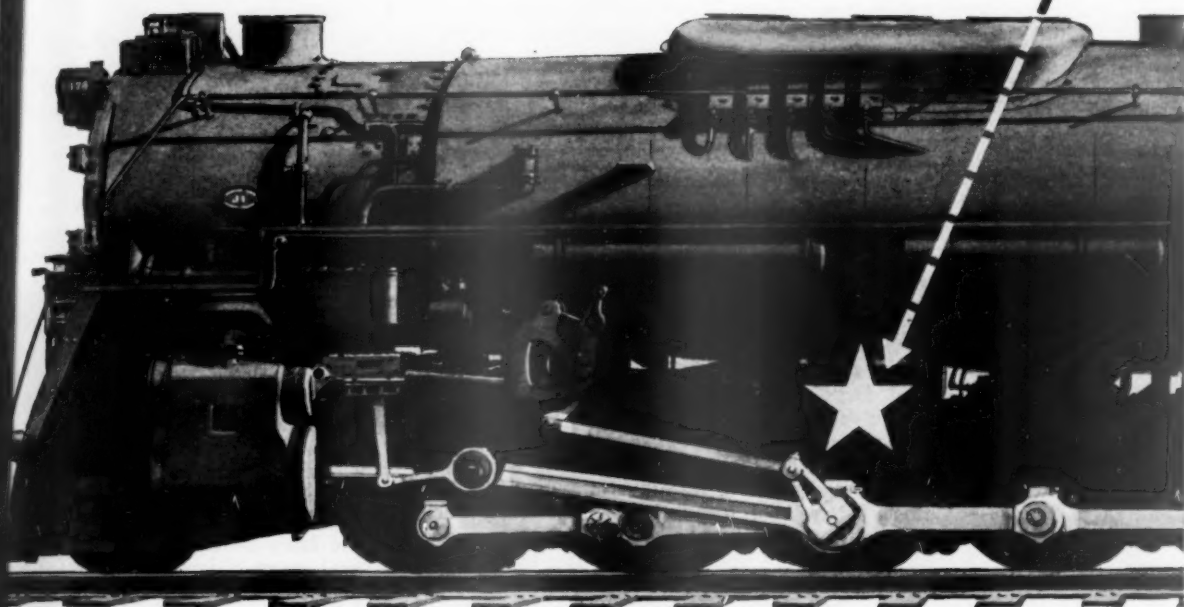


## ANTIDOTE FOR A POLITICAL POISON

Cleaning up debris left in the wake of war, residents of Prum, Germany, get their first taste of U. S. military rule—fair wages for voluntary labor. Hired by American occupation authorities through the burgomaster, the workers are paid the prevailing wage scale of the town before it was captured. No isolated instance, the treatment of Prum's residents meshes with plans for the administration of conquered areas. Officers have been instructed to permit workers to form "democratic trade unions and other forms of free economic association" to help dissolve the Labor Front and other Nazi-inspired organizations. Such freedom, however, will blossom under watchful eyes to assure that new organizations do not perpetuate old Nazi groups under new names.



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That's why SKF makes a *complete* line of both ball and roller bearings. True, in wartime, you have not always been able to obtain the SKF bearings you needed. That was because our armed forces have demanded so much of our production that even a six-times increase in capacity couldn't meet all the heavy military and civilian requirements.

Some day — fairly soon, we hope — SKF and its

distributors will again be able to offer you prompt service on a complete line. SKF makes practically all types of anti-friction bearings. Therefore, when SKF recommends a particular type of bearing, you may be sure that its recommendations are unbiased—the *right bearing in the right place*.



**SKF INDUSTRIES, INC., PHILA., PA.**

6003

# THE LABOR ANGLE

## Error

Interior Secretary Harold Ickes was dead wrong in assuming that this week's stoppages in the coal fields had under-the-table support from John L. Lewis' office. On the contrary, Lewis absented himself from negotiations with the operators for two days in order to whip recalcitrant elements in his union into line, to get local walkouts terminated.

There's nothing that Lewis wanted less than government seizure of part of the coal properties. Having some mines under government operation, others not, queers his pitch. A partial government seizure forced him into an agreement with the operators (page 5). It was either that or a national coal strike. He much prefers to have the mines privately operated while National War Labor Board decides whether it will approve the new contract.

The Lewis strategy shapes up this way: If he can get what he's after without a strike and before the European war ends, fine. If the war in Europe ends and he hasn't yet got satisfaction from NWLB, then strike. If he calls miners who work in privately managed pits out and some of those in government-operated properties follow, he and his union can be prosecuted under the Connally-Smith act. Obviously, Lewis is better off having all the mines in private hands at that time. Failing that, the next best thing is having them all government so that walkouts and slowdowns could begin "spontaneously" with union officials completely aloof from what goes on.

## Recoil

Threatening to become more important than the "charter for labor and management" which was signed by Eric Johnston of the Chamber of Commerce, William Green of the A.F.L., and Philip Murray of the C.I.O. is the recoil in labor circles which followed last week's announcement that such an agreement to "strive for labor peace" had been consummated. Conceived by Johnston as a goodwill gesture—the practical value of which was highly dubious—the agreement got a turndown from Ira Mosher, president of the National Assn. of Manufacturers.

Mosher explained his refusal to sign by saying the charter was too general to be worth much.

No one is offering a serious rebuttal to Mosher, but his motives are being subjected to searching questioning by union officials. Why, they want to know, if the charter doesn't mean anything, did the N.A.M. head expose himself to widespread criticism by refusing to sign it? They suggest it means that the N.A.M. is preparing to lead an open-shop drive after the war. At this point, the net effect of the charter on labor leaders seems to be that their distrust and suspicion of American industrialists have increased.

Actually, only a very few businessmen—and those of no great influence—are considering the organization of a postwar antiunion movement. There is sentiment for encouraging returning soldiers to do some union-busting, but even here countervailing opinion exists which holds that the vets will be more interested in taking over the unions than in breaking them (BW-Dec.30'44,p104).

## Expansion

President Roosevelt's executive order increasing the number of public members on the National War Labor Board from four to eight will eliminate the intra-agency jealousy which would have followed the promotion of one of the alternate members to the full membership vacated by William H. Davis. (The four alternates become full members and Jesse Friedin, NWLB's general counsel, moves up to a place on the board.) But giving the board eight equal public representatives serves an even more useful function: It speeds up the disposition of cases.

As a matter of fact, the alternates have been working just as hard and as long as the full members. However, what often happened was that parties in cases where alternates sat, sensing that a decision was going against them, would demand a hearing before the full board—a right to which they are entitled. Before the full board could get around to hearing the case, months might elapse. Now NWLB will have what amounts to two full boards and, as a result, final decisions will come along much faster.

charters as far as they affect farm machinery workers. In 1936, the United Automobile Workers changed its name to United Automobile Aircraft Agricultural Implement Workers and staked out a claim to all labor covered by that title.

U.F.E. was established in 1938 as a separate group out of the steelworkers union of which, up until that time, had been a part. There was so much virgin ground to be ploughed by organizers in those days that the overlap didn't trouble the C.I.O. high command.

• **Drive for Members**—Now, faced by V-E Day cutbacks and retrenchment all along the line, U.A.W. isn't over looking any bets to increase its membership. And in this regard U.A.W. by no means unique. Other unions—both C.I.O. and A.F.L.—are seeking similar opportunities. Rank-and-file disaffection and factionalism, which seem to be most pronounced in left-wing unions, provide attractive openings for any organization which would like to do a little raiding.

If C.I.O.'s new committee on jurisdiction doesn't come up with a formula for keeping the industrial union house in order, Murray may have to eat John Lewis' proud words.

## PAY WAIVER OUTLAWED

An employer's obligation to pay back wages under the Fair Labor Standards (Wage-Hour) Act cannot be discharged unless he pays the full amount due, the United States Supreme Court ruled this week.

In a 6-3 division, the court outlawed the fairly common practice of settling back wage claims by negotiated lump sum payments amounting to less than full settlement. The decision means that employees cannot waive liquidated damages by accepting a delayed payment of the basic statutory wages they have coming. The law gives employees double the unpaid overtime.

The decision came in two cases, involving the Brooklyn Trust Co., New York, and the Dize Box Co., Crisfield, Md. Both were sued by former employees who previously had accepted checks covering back overtime, and had agreed to waive penalty payments of the double overtime.

In upholding the former employees' right to sue, the court majority ruled that "a statutory right conferred on a private party, but affecting the public interest, may not be waived or released if such waiver or release contravenes the statutory policy."

In other cases the court denied interest on liquidated damages for minimum wages or overtime.



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The Electron Microscope reveals the fine details of human tooth canals (cross-section shown in background of photo above).

## RCA Electron Microscope - a new tool for dentistry

SEEN FOR THE FIRST TIME: the exquisite details of tooth canals! There are about 50 miles of canals or tubules in each human tooth! Yet never before could they be visualized so clearly for "close-up" examination of their tiniest details.

SEEN FOR THE FIRST TIME: entirely new tooth structures and surface irregularities, the very existence of which had until now been in doubt!

How SEEN?—through the RCA Electron Microscope, developed and perfected at RCA Laboratories. This Electron Microscope—with useful magnification up to 100,000 diameters and more—is a most efficient new tool for dental science—and one that promises to lay open the innermost hidden secrets of tooth structure and composition.

Besides aiding dentistry, the RCA Electron Microscope is already serving 27 different fields of science and industry.

Such research, as resulted in the Electron Microscope, goes into all RCA products. When you buy an RCA radio or television receiver, or a Victrola—made exclusively by RCA Victor—you get the greatest satisfaction . . . enjoy a unique pride of ownership. For if it's an RCA, you can rest assured it is one of the finest instruments of its kind that science has achieved.

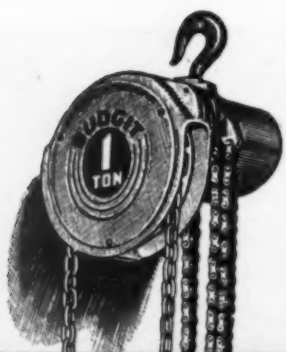


Dr. V. K. Zworykin (seated at left), Associate Research Director of RCA Laboratories, with Perry Smith (standing) and Dr. James Hillier at a portable type desk model of the RCA Electron Microscope—the new tool for modern science and industry.

# RADIO CORPORATION of AMERICA

PIONEERS IN PROGRESS





**81 lbs. lifts 2 tons**

A 'Budgit' Chain Block of 2-ton capacity weighs only 81 lbs. No other chain block of comparative type weighs anywhere near as little as this.

One man can lift and carry this 2-ton hoist whenever necessary—a unique advantage.

This light weight is accomplished by a revolutionary design (and special alloys) which is the first great improvement in fifty years of chain blocks.

Notwithstanding the light weight, the 'Budgit' is sturdy and incredibly efficient, for it has anti-friction bearings throughout and all working parts, including the automatic brake, operate in a grease-filled, sealed construction. So dust and grit cannot enter to contaminate the grease or interfere with the smooth functioning.

Another feature is the roller load chain which neither stretches nor binds under full loads.

Whenever you need hand-operated hoists, specify 'Budgit' Chain Blocks.

'Budgit' Chain Blocks are built to lift up to  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1, and 2 tons. Prices start at \$59.50 list. Send for Bulletin No. 357.



**'BUDGIT'**  
**Chain Blocks**

**MANNING, MAXWELL & MOORE, INC.**  
MUSKEGON, MICHIGAN

Builders of 'Show-Box' Cranes, 'Budgit' and 'Load Lifter' Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' Industrial Instruments.

## Wage-Hour Swell

Manufacturers of goods that aid interstate commerce, although used in state in which made, are brought under act.

Industries which produce goods used solely in the state in which they are made, but which facilitate interstate commerce, have been brought under the Fair Labor Standards Act in a new interpretation of the law by L. Metcalfe Walling, administrator of the Wages & Hours Division of the Dept. of Labor. Previously the wages and hours law was held to apply only to companies producing goods for interstate shipment.

• **Thousands Affected**—Several hundred thousand employees in a variety of industries are expected to be affected through 40-hour-week and overtime provisions of the law, with which their employers were ordered to comply on or before Apr. 15.

Companies added to the list already under the wages and hours law include those engaged in ice production, railroad tie manufacturing, rock crushing, production of electric energy, and preparation of telephone and telegraph poles, "or other similar items."

• **Courts Establish Rule**—The guiding rule is that goods must be: "For use or consumption wholly within the same state by interstate railroads, telephone or telegraph companies, radio broadcasting stations, and the like, in carrying on interstate transportation or communication, or for use or consumption within that state in the maintenance, repair, or reconstruction of essential

instrumentalities of interstate commerce, transportation, transmission or communication."

The broadened interpretation based on a series of court decisions holding that goods may be produced in commerce even though they do not subsequently leave the state.

Latest of these came in a test case before Judge F. P. Schoonmaker of the U. S. District Court in Pittsburgh. Judge Schoonmaker granted an injunction to the Wages & Hours Division requiring a contractor to pay overtime for more than 40 hours' work a week for employees engaged in highway repair and reconstruction work.

## Equal Rights

Fair practices committee of U.A.W. proves that it means business in providing for racial equality in union affairs.

Equal membership rights for all workers belonging to United Auto Workers (C.I.O.) is the aim of the union's recently created fair practices committee and its first decision, recently handed down, shows that it means business.

• **Rules on Negro Case**—The committee functions within the union much as the President's Committee on Fair Employment Practice does on a national scale. Created about six months ago, largely as a move to emphasize to Negro members that assurances of the board regarding U.A.W. rights were more than words, it adjudicates union situations involving racial equality, and develops for the FEPC any matters which

## MECHANICAL SQUIRREL

From three crow's nests on its 27-ft. mast, field hands feed the newest in walnut harvesters by knocking the crop into an apron. Towed by tractor, the last word in walnut pickers circles each tree—separating twigs and leaves from the fallen nuts and delivering them by conveyor screws to a bagging device in the tower. Invented and patented by M. E. Phillips, Stockton (Calif.) grower, the machine was designed for an area where manpower is now pitifully scarce. An earlier California walnut harvester (BW—Nov. 25'44,p116) reversed the Phillips process; it brought the nuts down mechanically but failed to pick them up.



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because it shows at a glance the fire and casualty insurance you carry to protect your family. Most men have no written record of their insurance hazards . . . of just when their insurance expires . . . what hazards it protects against . . . whether it covers today's increased values. And that's why, if you carry fire, burglary, liability and similar insurance, you need U.S.F. & G.'s new free Personal Insurance Audit Book!

You make your own audit. Clear, simply-worded, and with each hazard *illustrated*, the new Personal Insurance Audit Book is different from any insurance audit you have ever seen. It records property value, amount of present insurance, amount of premium, expiration date, etc. to give you your fire and casualty insurance picture at a glance.

To obtain your copy, simply fill out and mail the attached coupon. Your Personal Insurance Audit Book will be delivered to you promptly with our compliments. Mail the coupon today!

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Strapped pallet loads  
of truck wheel rims  
and springs

## UNIT-LOAD STRAPPING for PALLETS AND SKIDS

A pallet, like a skid, is a platform built to support a number of containers or products which, when strapped together, form a *unit load*.

Pallet loading conserves manpower by reducing the number of units handled—in packing, loading, warehousing and unloading. Pallet loading conserves container and packaging materials; con-

serves space—in warehouses, freight cars and ships. Throughout, pallet loading protects against damage.

Acme engineering is co-operating with the Armed Forces in pallet loading, and effecting the same economies for war time shipping as applied in the past to the movement and handling of peace time production.

**ACME STEEL COMPANY**  
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**ACME STEEL CO.**  
CHICAGO

outside strictly internal union matter. Its first case came up shortly after it was organized. Negro members of Local 662 at the Delco-Remy plant at Anderson, Ind., complained that they were barred from local clubroom facilities. The regional director was advised, in accordance with stated grievance procedure. The issue was referred to the union committee after he was unable to settle it.

• **Case Is Closed**—The committee heard evidence at Anderson and ordered the local to cease its discriminatory action. The local complied, thus closing the case. Had the local refused to settle the matter as the committee directed, the next step would have been reference to the international board, which could have taken punitive action as it saw fit, possibly suspension of the local's charter and installation of an administrative board to enforce its decree.

No other case has risen thus far to the committee level of adjudication.

Labor relations men of automotive companies have watched the formation of the committee with only indirect interest. Their attitude is that matters on which direct action is taken by the committee have no bearing on plant production and policies.

• **Making a Survey**—Managing the committee is George Crockett, Negro attorney formerly with the Dept. of Justice who makes a full-time job of studying fair practices and racial equality problems of the union, for handling by his group or reference to FEPC.

### SETBACK FOR LABOR LAW

As the U. S. Supreme Court finishes hearing arguments in a series of cases brought to test the constitutionality of a number of state "antiunion" statutes, the Third Court of Civil Appeals in Texas handed down a decision involving that state's Manford Act. That decision whittled away further the elaborately constructed Texas controls over organized labor activities.

The Texas court held invalid those sections of the Manford Act requiring unions to file an annual financial report with the secretary of state, and to file copies of agreements providing for dues checkoffs. It also knocked out, "as indefinite and uncertain," provisions which would make it unlawful for a union to refuse membership to an applicant without giving reasonable time for the applicant to decide whether or not he wants to become a member.

The appeals court approved sections of the law which order the reinstatement without payment of back dues of union members in the armed services and the exemption of certain unions from annual election of officers.

## Shipyard Pattern

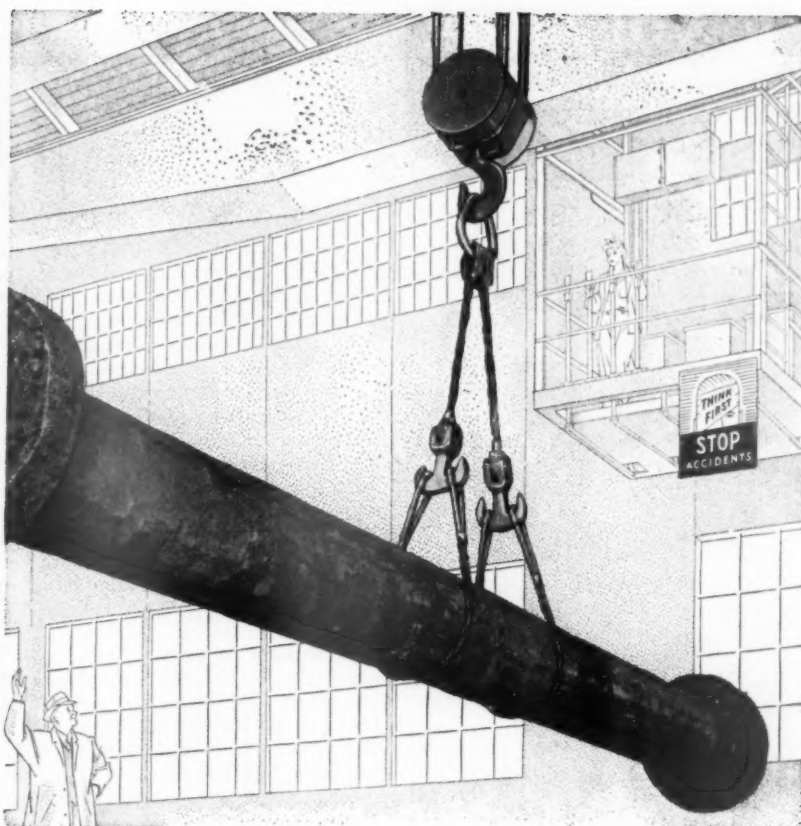
Union proposes guaranteed annual wage for 500,000 force peacetime workers in nation's shipbuilding industry.

Institution of an immediate 35-hour work-week, at pay equaling present total wages for 48 hours, has been asked by the Industrial Union of Marine & Shipbuilding Workers of America (C.I.O.) to avert layoffs expected to reach 500,000 by the end of 1945 if shipyard cutbacks continue (BW-Mar.24'45,p15). In a correlated resolution I.U.M.S.W.A.'s general executive board has asked for guaranteed annual wages for the industry, based on a rate of \$3,000 for 50 35-hour weeks and two weeks' vacation pay for first-class mechanics, effective after the WPB Shipbuilding Stabilization Committee acts later in 1945. This would continue into the postwar period present wage rates (annual earnings of first-class mechanics now average \$2,995.20).

**Cutback Protested**—The two resolutions are the union's answer to the problem of what is to become of some 500,000 persons who have been trained in shipbuilding during the war. The problem was made more pointed when former War Mobilization Director James F. Byrnes recently canceled construction plans for 72 combat ships. The shipyard workers called for renegeing the 72-ship cutback; asked that future cutbacks be made by ships and not by shipyards to permit spreading of work; and stressed the hazard of letting trained shipbuilding workers move into other industries.

Specifically, the union asks that its \$3,000 "standard wage" be viewed as negotiable, based upon the Bureau of Labor Statistics' cost-of-living index for 1941, and subject to increases.

**Payroll Levy Proposed**—The plan would work this way: An industry-wide stabilized employment fund would be set up by the government, with joint labor and management supervision. Employers would be required to pay into this fund 3% of their payrolls for at least three years—until an industry-wide insurance fund of \$150,000,000 has been accumulated. At that point contributions would stop unless an employer furloughs workers—gives them a temporary release. He then would be required to resume payments of 3% of his payroll or reimburse the fund for payments made to furloughed workers. Employees under temporary layoffs, and not elsewhere employed, would be entitled to receive from the insurance



## Is it loaded?

This is neither gun nor bomb. But a heavy, slippery lift of any kind may be charged with danger—to employees, the load itself and the production schedule. Fortunately, above, the firm grip of a Yellow Strand Braided

Safety Sling provides maximum security, supports the nation's urgent program to "Stop Accidents."

★ In your safety measures, consider the aid of Yellow Strand Braided Slings and Yellow Strand Preformed Wire Rope, as well. Both possess the inbred strength of specially-drawn steel wires, fortified with flexibility and ease of handling.

Their use helps to inspire confidence . . . to keep materials moving smoothly and economically. Remember the name:

Yellow Strand. Remember the patented constructions: Preformed Wire Rope and Braided Safety Slings.

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**PREFORMED WIRE ROPE • BRAIDED SAFETY SLINGS**

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**PILE SCIENTIFICALLY with this  
Electric REVOLVATOR Portable  
Elevator**

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REVOLVATOR Portable Elevators collapse by hinge or telescopic method to permit wheeling under low doorways or other obstructions. Equipped with many safety features.

Supplied with or without revolvable base, and platform type to suit material handled. Inexpensive, simple, efficient. Will last a generation, frequently longer.



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**REVOLVATOR Co.**  
DESIGNERS AND MANUFACTURERS OF MATERIAL HANDLING EQUIPMENT

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**ST. LOUIS**  
*a great city*



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DOWNTOWN ST. LOUIS AT YOUR DOORSTEP

## WORKS MANAGER WANTED

Company normally employing 1100 is looking for a capable Works Manager.

Essential requirements are a sound engineering background and experience in building high grade medium and heavy machinery.

He should have the ability to plan and direct quality production, secure results economically and have the knack of getting others to work with him and for him. His own enthusiasm should be contagious.

An old established Company with progressive policies and modern plant has a real opportunity and future for the right man. Company at present 100% in war work but has standard line of pre war nationally recognized products for post war years.

Write full details as to experience, etc. including earning record. Correspondence considered in confidence, with no references contacted without first being released by you. Address

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330 West 42nd St., New York 18, N. Y.

fund weekly payments equal to the difference between state unemployment compensation and their guaranteed wage.

• **Indemnity for Jobless**—Any workers permanently laid off would be entitled to indemnity based upon 8% of annual earnings for each year they were employed during the war emergency, up to a maximum of five years. This would be a lump sum payment—and, as an example, for a \$3,000-a-year mechanic employed in a yard for the maximum of five years the payment would be \$1,200.

I.U.M.S.W.A.'s resolution calls for the designation of a special subcommittee to be set up by the Shipbuilding Stabilization Committee of WPB, to include government, industry, and labor members, and to act on the guaranteed wage question by midsummer. Speed is urged to permit inauguration of the program so that "substantially the present employment in the shipbuilding industry may be maintained after V-E Day."

• **From Yard to Yard**—I.U.M.S.W.A.'s blueprint for a shortened work-week and guaranteed wage calls for stabilized production. Present machinery of the shipbuilding stabilization program would be adapted to the allocation of ship work on a port-wide or regional basis. As the demand for a specific craft tapers off in one shipyard, I.U.M.S.W.A. would program work elsewhere so there would be need for that craft in another yard nearby. Workers would shift from yard to yard, on furlough from their original employer. Planning for the guaranteed wage would take into consideration their total time employed in all yards.

The union believes that the 35-hour week would make possible continued employment of 1,200,000 persons in shipyards during 1945 (the January, 1945, figure, including Navy yard civilians, was 1,446,000). The demands for 1946 could be met by guaranteeing employment for 750,000 persons; subsequent guarantees would be for a peacetime employment of 500,000.

• **First Union Program**—I.U.M.S.W.A.'s board announced its double-barreled attack on the threat of postwar unemployment as the first program by an American union "embodying definite goals, standards, and procedure to achieve demands in this field."

However, other unions are working toward the same objectives. United Auto Workers (C.I.O.) negotiators with General Motors and other automotive and aircraft manufacturers are seeking guaranteed wages and severance pay along with other social security provisions financed through contributions by employers of a percentage of payrolls (BW—Apr. 7 '45, p88).

## Salary Clinics

C.I.O. office workers union offers guidance to white-collar employees seeking salary raises. It will help employers, too.

About 15,000,000 nonagricultural employees are classified as white-collar workers. The Bureau of Labor Statistics estimates that of these, 1,400,000 carry union cards—the bulk of them employed as school teachers, retail sales people, telephone operators, and away clerks.

• **Small but Articulate**—United Office Professional Workers Union (C.I.O.) claims to represent only 60,000, but is by far the most articulate organization in the field, and its members correspond most closely to the Kitty Foyle conception of what a white-collar worker is.

U.O.P.W. has a tough time organizing. The resistance to unionism on the part of the group to which it directs attention has proved pervasive and intense. Outside of New York, Chicago and Detroit—and in those cities membership is largely confined to bank and insurance companies—U.O.P.W. has little strength. But, undaunted, it is always coming up with new schemes to increase its influence and prestige.

• **To Set Up Clinics**—Figuring that ignorance of salary stabilization rules is one of the biggest barriers to pay boosts for white-collar workers, U.O.P.W. now plans to establish a "free salary clinic" in New York and Chicago.

Announcing the creation of the clinics in a half-million leaflets now being distributed, U.O.P.W. offers free expert assistance to employers and employees alike in securing government approval of salary increases. In the program it expects to have the cooperation of various professional, social, and educational groups not identified with union labor.

Emphasizing that no one who avails himself of the service is being asked to join the union, U.O.P.W. points out the direct interest of its own members in seeing that all white-collar salaries go up. Familiarity with government procedure is what U.O.P.W. is really offering.

• **Experienced Guidance**—White-collar pay averages have lagged far behind hourly wages since the war began. (Average weekly earnings of white-collar employees went up 21.4% between January, 1940, and June, 1943, while nonwhite-collar earnings rose 68.1% in the same period.)

Many white-collar employees have not received the increases permissible



Dorothy Kilgallen has shown her a glamorous world...



...you're lucky, Procter & Gamble,\*  
your ad comes next!

HE'S young in heart. She's young in years. Life for her holds a full measure of hopes and dreams. So, naturally, she turns to *Cosmopolitan*! And in *Cosmopolitan* she has just discovered a thrilling new romance by Dorothy Kilgallen, one of the galaxy of famous writers who contribute to this famous magazine.

*Cosmopolitan* publishes the best

authors, because its editors know that great writing makes great reading. Great writing plays upon the emotions. It loosens hidden longings for the pleasanter things in life.

What a swell atmosphere for your ads, Procter & Gamble! Tell her again about Camay and those Camay brides even as she's living the life of a Dorothy Kilgallen heroine. Keep sell-

ing her Ivory Soap and Drene while she's visiting the magical world created by the talented tellers of tales who write for *Cosmopolitan*. And, now that the stage is set, speak to her of Teal, Ivory Snow and Oxydol.

Emotion makes war\*. Emotion makes marriages. AND emotion makes sales.

\*An advertiser in *Cosmopolitan* since 1911.

# Cosmopolitan

GREAT WRITING MAKES GREAT READING

Emotion makes Wars ✓  
Emotion makes Marriages ✓  
Emotion makes Sales ✓



...yes, after *only 15 minutes instruction* on a Friden Fully Automatic Calculator anyone in your office can become an Expert on your own Figure Work Problems. Contact your local Friden Representative for complete information regarding these *easy to operate* Calculators which are AVAILABLE, when applications for delivery have been approved by the War Production Board.

*Friden Mechanical and Instructional Service is available in approximately 250 Company Controlled Sales Agencies throughout the United States and Canada.*

# FRIDEN

**FRIDEN CALCULATING MACHINE CO., INC.**

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under National War Labor Board Treasury Dept. regulations, and bulk of these employees is probably the smaller offices where employees have not known how to thread way through government red tape. salary clinic will provide experienced guidance.

## WELDERS REJECT STRIKE

Overwhelming rejection of strike proposals by welders in three Puget Sound shipyards during the past fortnight did not remove the threat of strike, as welders have demonstrated before.

Historic gripe of the United Brotherhood of Welders, Cutters & Helpers (unaffiliated), intensified since warshipbuilding created thousands of jobs in that craft, has been (1) that welders employed on A.F.L.-controlled projects must carry cards in which A.F.L. unions their work associates them with, (2) that A.F.L. will charter a welders' union.

In the Puget Sound area, the United Brotherhood's feud is with the A.F.L. boilermakers. After an "illegal" strike two months ago (BW-Feb. 17 p. 110), the independent union laid groundwork for a legal one by inducing the National Labor Relations Board to conduct a strike vote.

Results of these elections, completed last week, reflect thumping sentiment against a strike at Todd Pacific Shipyard, Tacoma; Puget Sound Bridge Dredging Co., Seattle; and Everett Pacific Shipbuilding & Dry Dock Co. Everett. But the brotherhood is making time until an investigation of complaints is completed.

## SENIORITY CONTROLS

Union membership has been ruled out as the determining factor in hiring of seasonal workers in Salinas (Calif.) and Phoenix (Ariz.) vegetable and packing industries. Instead, under a National War Labor Board directive, seniority within each company must be the guide.

The NWLB order modified a decision by the tenth regional war labor board at San Francisco, which had directed preferential hiring of members of Local 78 of the United Cannery Agricultural, Packing & Allied Workers (C.I.O.). The regional board also ordered a compulsory checkoff of union dues for 7,000 seasonal employees. Companies complained that this was the equivalent of ordering a union shop.

Under the new order, work dating back to the 1943 fall season is to be considered in determining company seniority in the Central Arizona G

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& Shippers Assn. and Individual Growers & Shippers of Salt River Valley both operating in the Phoenix area. Majority will be computed to the beginning of the 1944 fall season for employees of the Grower-Shipper Vegetable Assn. of Central California and the Ralph E. Myers Co., in Salinas. The checkoff was restricted by NLRB to those holding union memberships or those who join the union during the period of their employment.

## WORKING WHILE YOU WAIT

Travelers in Chicago's Union Station have been surprised recently to hear announcements like "Sgt. John Spencer comes, please go to gate 7 immediately" followed by the plea: "The Union Station Co. needs men and women for essential employment. Please inquire at the information desk."

The announcements are spaced about 10 minutes apart between 7:45 a.m. and 9 a.m. and 4:30 p.m. and 6 p.m. in an effort to interest suburban travelers. The plan has brought no rush of applicants, but station officials are thankful for even small results.

The station will hire almost any adult for periods of one hour up to work as baggage handler, clerk, or typist. Several soldiers and sailors, stranded for long waits between trains, have applied, handled baggage for a few hours, and departed somewhat richer.

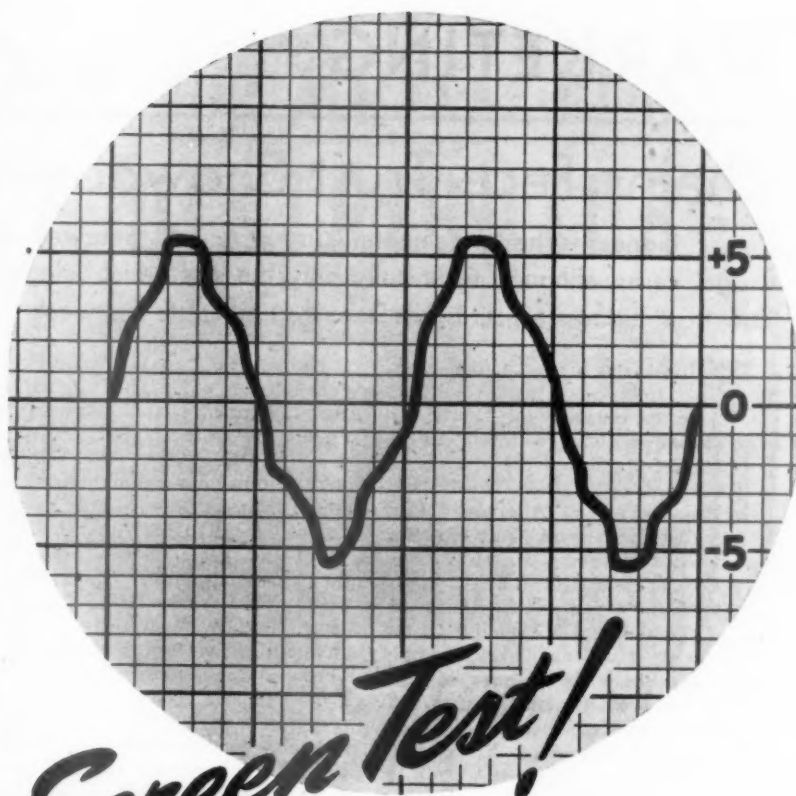
## A.M. QUILTS AIR COUNCIL

Withdrawal of the A.F.L. International Assn. of Machinists last week from the chummy explorations of the Southern California aircraft industry for an independent labor umpire system (BW-Feb.17'45,p96) ended the honeymoon.

The machinists, together with the C.I.O. United Auto Workers, and subsequently the unaffiliated National Welders Union, had agreed with the aircraft makers, subject to reservations, to set up a single tribunal of last resort to which all stubborn labor disputes could be referred.

As negotiations toward such a setup progressed last week in conjunction with talks about wage downgrading and other disputes (BW-Jan.20'45,p100), the machinists abruptly pulled out of the conference and announced that they were breaking relations with all bodies created or inspired by the government in the aircraft plants.

Though the auto workers and welders remained, it was obvious that a catch-all umpire system was out of the question if the machinists remained on the outside.



and a midget motor  
has *fidgets...*



The "shakes" show up in even the best-balanced electric motors. For the super-sensitive cathode-ray oscillograph, on which Robbins & Myers engineers test all new fractional horsepower designs, greatly magnifies even the slightest case of jitters in order that it may be studied. And a motor that vibrates beyond a fixed limit never gets out of the research laboratory.

For excessive vibration set up by magnetic or mechanical motor unbalance is bad. Take, for example, in a phonograph or oil burner. With one, you'd squirm while a discordant motor squeal fought with the sweet strains of the Moonlight Sonata. With the other, you'd probably chill as the repairman worked over the worn bearings that result from unbalanced operation at the speeds which oil-burner motors usually attain.

Robbins & Myers engineers design fractional horsepower motors for balance. But they don't check a drawing and call it a day. They test out their own precise calculations with this cathode-ray "screen" test.

Why not let this type of "follow-through" engineering help you find the right motor for your particular application. That also goes for problems of materials handling, converting machines to direct drive, ventilating, and pumping. Address: Robbins & Myers Inc., Springfield, Ohio. In Canada: Robbins & Myers Co. of Canada, Ltd., Brantford, Ontario.

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# MARKETING

## Chains Face Trust Showdown

Bigness is the fundamental issue in A. & P., Safeway, and Kroger cases, although technically only the sins which allegedly flow from bigness are at issue. Danville trial starts this week.

How big is too big for a food chain to be?

This is the question the courts will have to answer before they see the last of the Justice Dept.'s criminal antitrust suit against the Great Atlantic & Pacific Tea Co. After many false starts, that suit finally goes on trial next week in Danville, Ill. (BW-Apr. 7'45,p7). There will be no final decision short of the U. S. Supreme Court. And if this decision is favorable to the department, it will very likely be only preliminary to a long series of civil actions in which the trust busters seek to make their victory stick.

• **Weapon of Coercion?**—No part of Justice Dept.'s case against A. & P. is directed against bigness, as such. But the government passes up no opportunity to document its argument that A. & P. has used bigness as a weapon to coerce competitors and suppliers alike. It is implicit in the government's argument that without resort to monopolistic practices, trade restraints, and unfair competition—in violation of the antitrust laws—A. & P. could not have achieved its present dominance in the food industry.

Regardless of the legalities—so far as the Justice Dept. is concerned, A. & P. is too big.

A. & P. is the No. 1 U. S. food chain (and the world's largest privately controlled retail operation) with total sales of \$1,310,754,626 in the fiscal year ended Feb. 29, 1944. Safeway Stores, Inc., is No. 2, with sales of \$656,571,505 for the calendar year 1944. The Kroger Grocery & Baking Co. is No. 3, with 1944 sales of \$448,381,416.

• **Others Are Targets, Too**—A. & P. is bigger than its two closest competitors combined. But in the Justice Dept.'s opinion, the difference between No. 1 and No. 2 and No. 3 is merely one of degree. Backed up behind the antitrust suit against A. & P. are similar suits against Safeway and Kroger. Charges in the three suits are almost identical. If the government can make its case against A. & P. stick in the courts, it stands a good chance of doing the same for the other two chains.

The A. & P. case is already two and a half years old. The original antitrust indictment was handed down by a grand jury in the U. S. District Court in Dallas late in 1942 (BW-Dec. 5'42, p69). Similar indictments were handed down against Safeway and Kroger in Kansas City, Kan., two months later.

On the heels of the indictments, the chains promptly came through with sundry demurrers. The Dallas court knocked down the A. & P. indictment as too "inflammatory," vague, wordy, and otherwise deficient (BW-Feb. 20'43, p8). The Safeway and Kroger indictments were similarly thrown out, chiefly for vagueness (BW-Jul. 3'43, p8). The Justice Dept. then went to the appellate courts, which eventually reinstated all three cases (BW-Aug. 7'43, p81; Sep. 2'44, p95).

• **New Proceedings Started**—By this time, however, the trust busters had decided that Dallas was no place to try A. & P. When the Dallas court struck out a long list of charges (a move which the Justice Dept. regarded as

rendering the indictment invalid), the Antitrust Division failed to go through with a bill of particulars requested by A. & P.'s attorneys, and the proceedings to wither until the indictment was dismissed.

New, and almost identical, proceedings were then started in Danville the court of Judge Walter C. Lane (BW-Mar. 4'44, p94). Judge Lane was favorably remembered by the Justice Dept. for his decision in an antitrust case directed at the finance operations of three big automobile manufacturers—Ford, Chrysler, and General Motors (BW-Nov. 25'39, p10).

Further action in the Safeway will wait until the A. & P. trial is over. Kroger is last in line.

• **The Charges Against A. & P.**—Unfair practices with which A. & P. is charged are:

Methodically eliminating independent competitors by manipulating prices until the desired share of the given local market is obtained.

Coercing remaining competitors to maintain prices at levels set by A. & P.

Coercing suppliers into granting discriminatory prices, discounts, advertising allowances, in the teeth of the Robinson-Patman law (coercion allegedly accomplished through threat of withdrawing its tremendous buying power and the even more powerful threat of entering the market itself with an integrated manufacturing operation).

Manipulating produce markets to its own advantage and to the detriment



Having won the first bout (two years ago) in the big antitrust action against A. & P. John A. Hartford, president, and Carl Byoir, public relations counsel, must now cross swords with an even more determined Dept. of Justice.

# One Stop FOR ALL FLAT GLASS... YOUR L·O·F DISTRIBUTOR



Daylight Engineering, accomplished by large Plate Glass windows, opens up this store . . . attracts customers inside.

## COMPLETE STOCKS AND SERVICES FOR ALL KINDS OF BUILDINGS

For flat glass in office, home, school, hospital, church, library or even factory—you can depend on your Libbey-Owens-Ford Distributor to economically and efficiently meet your glass needs.

He is as near as your telephone—his number is in the yellow pages of your phone directory. He carries complete stocks of practically every kind of flat glass, for industrial, commercial and residential glazing.

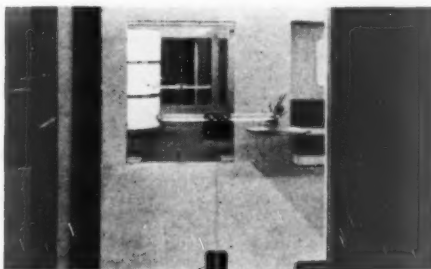
He can give you facts about Thermopane—the new L·O·F glass insulating unit which reduces heat losses and makes practical today's larger window areas. He can supply Polished Plate Glass for glazing and fine mirrors, colored plate glass, Tuf-flex doors, Vitrolite and Glastone for interiors and exteriors, Heat Absorbing glass, Frosted Aklo for industrial glazing, and Blue Ridge Decorative Glasses.

If you're planning new construction or remodeling, take advantage of the full line of products and services available from your L·O·F Distributor. Phone him today for information.

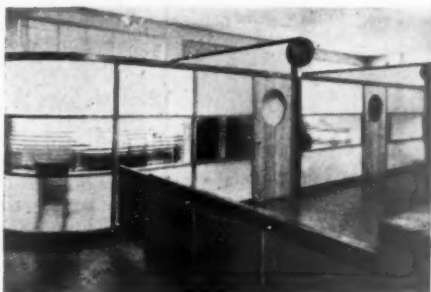


Architects Dale McNary and Edwin Krafft

Windows in this Minneapolis bank and office building are glazed with Thermopane—new L·O·F Glass insulating unit—to prevent excessive heat loss. It is available in a variety of sizes and thicknesses.



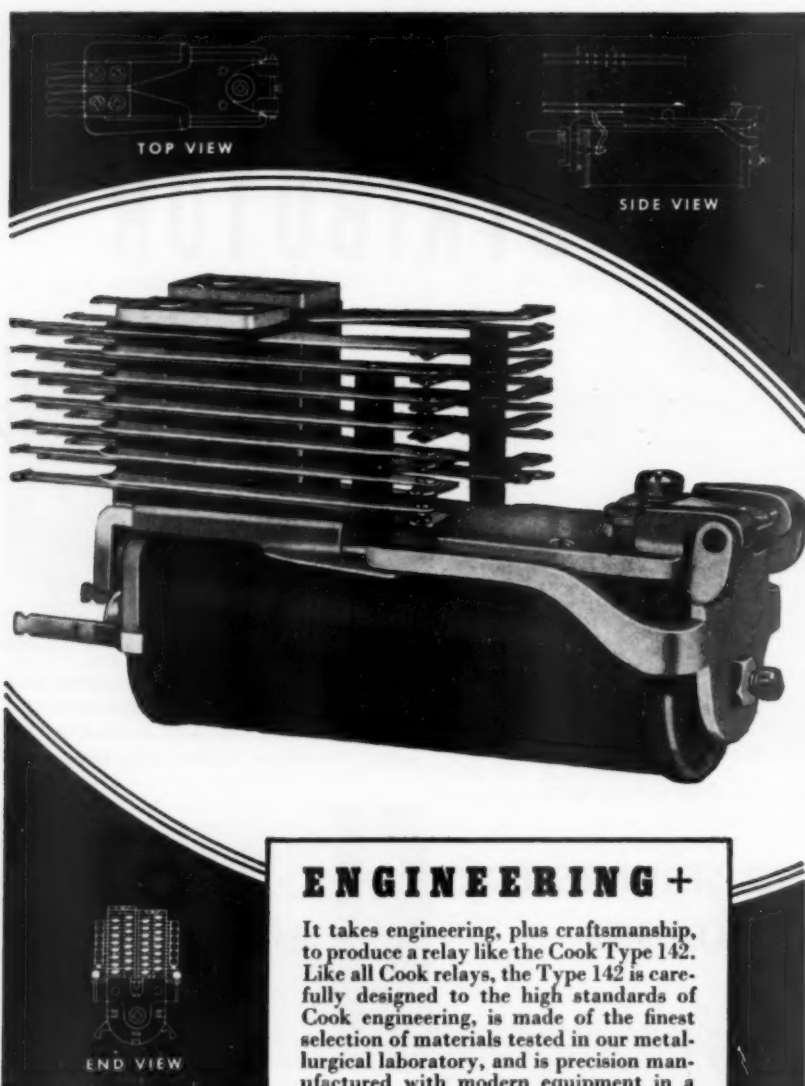
Transparent Tuf-flex glass doors, tempered to withstand punishment, open up the store's interior . . . help invite customers inside.



Blue Ridge Patterned Glasses add smart, decorative touches. They're available from L·O·F Distributors.



**LIBBEY·OWENS·FORD**  
*a Great Name in* **GLASS**



## ENGINEERING +

It takes engineering, plus craftsmanship, to produce a relay like the Cook Type 142. Like all Cook relays, the Type 142 is carefully designed to the high standards of Cook engineering, is made of the finest selection of materials tested in our metallurgical laboratory, and is precision manufactured with modern equipment in a model plant. However, it is a relay like this, representing almost the maximum number of spring pile-ups, wherein the qualities of Cook craftsmanship are so predominantly apparent. It is the careful assembly, adjusting of springs, and inspection and testing that produces the unseen qualities of Cook relays.

The Type 142 is a standard type relay operating at 48 Volts, D.C. Armature is of Armco magnetic iron, springs of nickel silver, with bakelite insulators baked at 150 degrees for 100 hours, and phosphor bronze bearing pin. The contacts are palladium and contact combination consists of 11 Forms "A", and one each of Forms "B", "C" and "D".

*A Product of the Electro-Magnetics Division of*

2700 SOUTHPORT  
AVENUE

CHICAGO  
14, ILLINOIS

**COOK ELECTRIC**

*Company*



## Food Price Drive Begins

OPA's grocer-consumer anti-inflation campaign got off to another start this week. The first attempt, aimed principally at getting better price posting by food stores, fizzled when a check-up by OPA indicated that no improvement in posting had taken effect on the number of price violations (BW—Feb. 10 '45, p. 97). This time, OPA and the trade are realistically gunning for better price compliance. The new campaign is scheduled to run until summer.

• Consumer groups which participated in the first campaign are now frankly skeptical, can't drum up much interest in this second try. They still think that the only way to turn the trick is to give individual ceiling price lists to shoppers.

These lists, tried out by OPA in a small way (BW—May 15 '45, p. 97), are anathema to the trade because they show comparative prices for group 1, 2, 3, and 4 stores. When the trade offered to participate in the anti-inflation drives, it was understood that OPA would forget about the price lists.

• Needled by consumer spokesmen, OPA is still thinking about price lists, however. If the second trade campaign proves a dud, there's a fair chance that the lists may still be used. As a compromise, some consumer groups might go along with grocer-distributed lists which showed ceilings only by individual store groups—didn't undertake any invidious comparisons.

of competitors and growers, specified through the operations of its Atlantic Commission Co., both as buyer of A. & P. and as broker for the trade.

Publishing false comparisons of & P. prices with those of competitors (actually, the department charges, & P. engages in short-changing, short weighing, and other activities which make its actual prices higher than advertised prices.)

Attempting to camouflage all the activities through the promotion of sundry, "false-front" farmer, consumer housewife, and civic organizations.

• Carl Byoir Named—The Safeway-Kroger indictments do not name of side public relations and publicity consultants. But the A. & P. suit includes defendants Carl Byoir, A. & P.'s public



ations counsel, and Business Organization, Inc., one of Byoir's companies. Byoir is specifically charged with organizing and dominating "cooperative" associations of fresh fruit and vegetable growers and shippers, thereby increasing A. & P.'s dominance in the produce market. The Justice Dept. has gone to some pains to document the case against Byoir because the Fifth Circuit Court failed to sustain the original Dallas indictment with respect to him. A. & P. and co-defendant Byoir categorically deny all charges. Both A. & P. and Kroger indictments come down hard on the defendants' produce-buying subsidiaries—Atlantic Commission Co. and Wesco Foods Co.—for their joint buying and brokerage activities. Safeway escaped on this point because it did not have a produce subsidiary at the time the indictments were filed, although it has one now. Safeway's produce subsidiary does not act as broker, however.

**Cruz of the Suits**—The meat of the government's antitrust suits against all three chains is found in its attack on their integrated operation. It is this integration which the government regards as primarily responsible for the chains' leverage over both suppliers and retail competitors; over suppliers through direct competition, or the threat of competition, in manufacturing, processing, and brokerage; over retailers because the savings and profits from these operations protect the chains against the consequences of retail price policies designed to increase their share of the market.

Thus, in the long run, the Antitrust Division cannot be expected to content itself with anything less than a complete divorce of the chains' primary function of selling food at retail from their subsidiary functions. Since affirmative decisions in the present cases would only establish guilt, not apply specific remedies, the Justice Dept. could be expected to follow them up with civil suits seeking divestiture—unless the chains voluntarily undertook a drastic housecleaning.

**More Rather Than Less**—In the meantime, the chains are moving in the direction of more, rather than less, integration. Safeway's establishment of a produce buying subsidiary is one example. Recent chain store acquisitions of meat packing plants (a trend which the trust busters regard with a jaundiced eye) is another.

The growing emphasis on "commodity" rather than "brand" buying—in which Safeway is the leader (BW-Mar. 31 '45, p. 80)—is further evidence of the chains' determination to free themselves from dependence on outside sources of supply.

I don't mind work. I am still young enough to keep this organization humping twenty-four hours a day as long as we are at war. *But I am sick and tired of fighting winter. Idle machines—*

## MR. JONES DECIDES TO DO SOMETHING ABOUT THE WEATHER

because men can't get to work . . . interrupted shipments—in and out . . . increased fuel costs. So help me, I am going to look around for a plant

location where snow, sleet and ice are conspicuous only by their absence. . . . Here in Georgia a mild climate allows uninterrupted production the year-round.

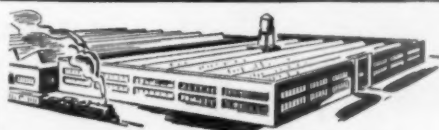
Plant construction costs less. Fuel costs are lower. Here you will find abundant raw materials, plenty



of good soft water, excellent transportation facilities, dependable electric power at low rates, an ample post-war labor supply—99% native-born. You will find too a widespread spirit of friendliness, mutual respect and confidence between workers and management. In Georgia a friendly people and a friendly climate help smooth the way for profitable operation.

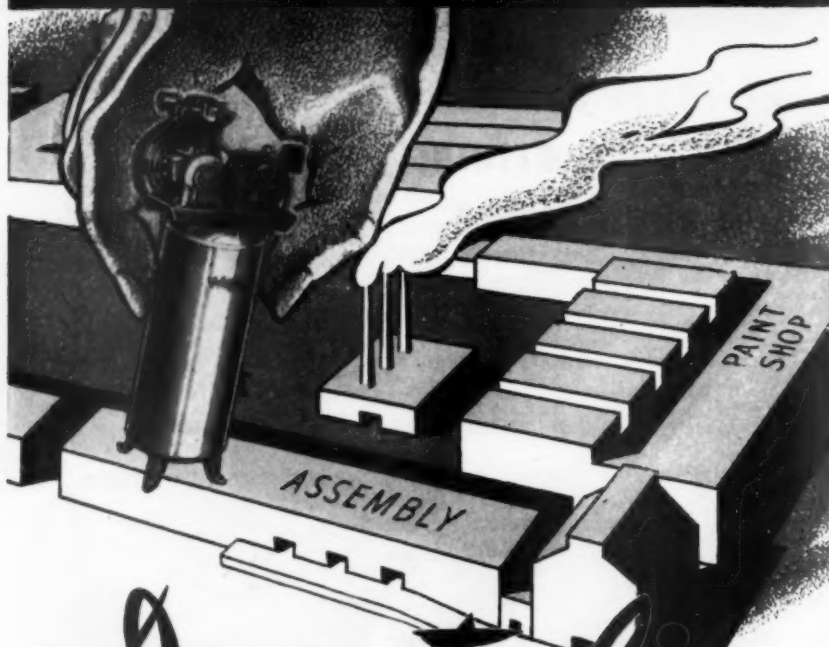
In many of Georgia's excellent small towns where there are no large industries, you will find an ample post-war supply of intelligent, adaptable, friendly workers. Our staff of industrial engineers has assembled accurate data on favorable industrial sites for specific lines of manufacture.

Write Industrial Development Div., GEORGIA POWER COMPANY, Atlanta, Georgia.



PLANT the Future in  
**GEORGIA**

# WHERE AIR IS VITAL



## Decentralize AIR SUPPLY!

**THERE** are many advantages in adopting a progressive plan of decentralizing compressed air supply with auxiliary Wayne Compressors. In a growing factory individual units may be added in new departments inexpensively and facilities can be moved or expanded easily as air requirements

change. If the present central compressor is overloaded or in need of repair, smaller units installed in vital departments not only supplement it satisfactorily but eliminate danger of total air failure, provide air at special pressures, and save the cost of operating the big unit when those departments work overtime. Get the whole interesting story now.

**THE WAYNE PUMP COMPANY**

Industrial Division  
FORT WAYNE 4, INDIANA

**Free**

A thought-provoking booklet. Write for your copy.



**Wayne**

**AIR COMPRESSORS**

## War Vision Dims

Spectacle wearers have increased 33½% since Pearl Harbor, and short-handed optical industry has been rushed.

More people have been converted to wearing glasses since the war started than in any comparable period in history. In recent months, the upward curve has become more pronounced and where or when the peak will be reached is anybody's guess.

• **Nationwide Trend**—Ophthalmologists, optometrists, and opticians tell the same story. The condition is nationwide, although most pronounced in industrial areas where thousands in war factories are finding a need for glasses.

Many of these are new employees who experienced no eye trouble at their former occupations, hence were unaware of the need for corrective measures until defects showed themselves in plant medical examinations. Others are finding hidden eye weaknesses uncovered by the strain of longer hours and day and night shifts.

• **Vision Tied to Age**—Then there is the older group to whom plant gates have been opened by the wartime need for manpower. Figures of the Better Vision Institute show a direct relation between age and eye trouble. Only 23% have eye defects at 20, 39% at 30, 48% at 40, and 71% at 50.

Optical companies estimate that 20,000,000 are wearing glasses today. This reflects an increase variously estimated at 33½% to 50% since Pearl Harbor. And they say this is only one-third of the people who need them.

• **Soldiers Fitted**—In the Army alone 4,300,000 pairs of spectacles had been issued to Nov. 1, 1944. And each man leaving the country is given an extra pair for emergency use.

Since approximately one-third of the industry's personnel is in the armed forces, the spurt in civilian demand has not been met without some change being made. Many opticians who specialized in 24-hour service on prescriptions now require up to a week; others are making no delivery promises.

• **Women Predominate**—More women than men wear glasses. William C. Wendt, president of the Guild of Prescription Opticians of Philadelphia, says women accounted for 60% of total business in normal times, and that this proportion has grown since the war started.

A factor has been the introduction of new types of spectacles and frames.

• **Lens Prices Stable**—Prices today are at 1940 levels despite higher labor costs.

Dims

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# EYES work better with the personally- fitted lighting of **DAZOR** *Floating* **LAMPS**

Many of your workers are handicapped by defective vision. You *can't* give them better eyes but you *can* help balance sight inequalities with Dazor Floating Lamps: flexible, *localized*, high intensity lighting which provides an *individual fit* for each operator. And easy does it! Fingertip



**DAZOR** *Floating* **LAMPS**  
FLUORESCENT and INCANDESCENT



pressure *floats* the Dazor to any desired position, where it *stays put*—without locking or tightening—until moved elsewhere. This is due to a patented enclosed spring force which balances the arm automatically.

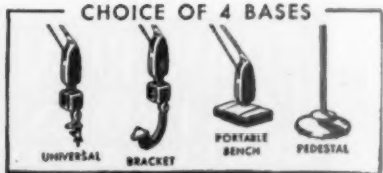
Whether for eyes old or young, sound or defective, Dazor Floating Lamps make seeing easier on all jobs requiring concentrated and prolonged vision: precision machine work, inspection, fine assembly, and drafting. They help increase output, reduce spoilage, minimize fatigue, promote safety and increase profits.

## Call Your Dazor Distributor

For complete information, experienced application assistance and a practical on-the-job demonstration, phone one of the Dazor-appointed distributors in your locality. Their names, if unknown to you, can be secured by writing to the Dazor Manufacturing Co., 4483 Duncan Ave., St. Louis 10, Mo.

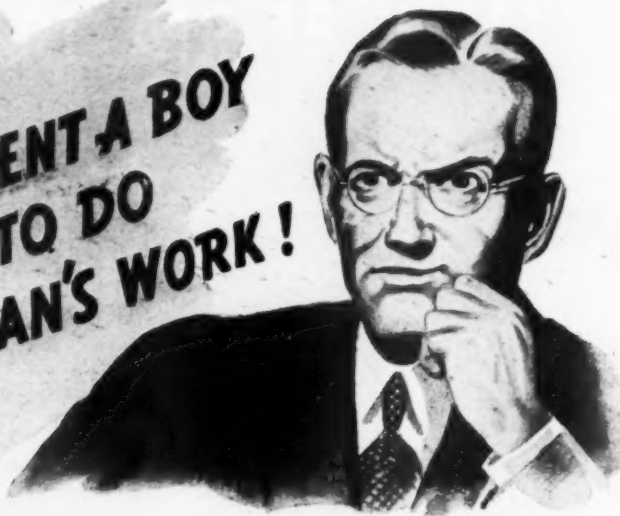
IN CANADA address all inquiries to Amalgamated Electric Corporation Limited, Toronto 6, Ontario.

### CHOICE OF 4 BASES





**HE SENT A BOY  
TO DO  
A MAN'S WORK!**



**1** THERE WAS AN EXECUTIVE who had the old-fashioned idea that any youngster could handle the mail for his organization. But along came the war with its added flood of correspondence and his mail situation was in a bad way.



**2** SO HE ADDED ANOTHER . . . and another . . . until his mail-handling costs were tripled. And incoming mail still didn't get distributed on time and important outgoing letters still missed trains and planes. Something had to be done!



**3** ONE DAY HE SAW an advertisement that was right up his alley. For the first time he realized how he could put efficiency into his mailroom, speed up the work of his entire organization and make the most of every postage dollar.



**4** WELL, IT DIDN'T TAKE HIM LONG to get in touch with a U. S. Postal Meter Specialist who suggested he put a competent person in charge and install machines and systems when they are available. So, if you are having mailroom troubles, get in touch with your U. S. Postal Meter specialist. He'll gladly help plan your modern, postwar mailroom now.

Metered Mail Systems . . . Postal and Parcel Post Scales . . . Letter Openers . . . Envelope Sealers . . . Multipost Stamp Affixers . . . Mailroom Equipment. (Many units available.)

**COMMERCIAL  
CONTROLS  
CORPORATION**



Our Plants A and B proudly fly the Army-Navy "E"

**U. S. POSTAL METER DIVISION**

Rochester 2, New York  
Branches and Agencies in Principal Cities

and the fact that new type frames are more expensive. But lens costs have varied in six to eight years, according to a spokesman for the American Optical Co.

OPA had a hand in this stabilization. The industry found costs out of line with selling prices in January, 1942, and prepared a new quotation list which came out the following March. It was in effect only a few days when OPA rolled prices back to the old levels.

• **For Services Rendered**—The OPA action is a sore spot with the industry since it designated spectacles as mere merchandise, as against the trade's contention that they are a therapeutic device prescribed by a professional man. The industry is trying to teach the public that payments are for services rendered, not for glasses.

American Optical Co. spent hundreds of thousands of dollars in 1942 in national advertising with that as a general theme and has continued it this year.

• **"Shysters" Deplored**—The smaller optical firms which quote glasses at extremely low prices and then put sales pressure on customers to purchase better frames (lens costs are uniform) are considered by ethical practitioners in the same class as shyster lawyers and shady doctors.

Without them, those exclusively in the optical business would be in a position to charge on the basis of a customer's ability to pay, as other professional men regulate their bills in accordance with a person's income.

## CHRISTMAS TRADE PLANS

Manufacturers and distributors who hope to reach servicemen abroad with suggestions for 1945 Christmas gifts for the folks at home are doing their planning now, for the Army Exchange Service issues its Christmas gift catalog in July.

One of these is the California Fruit Growers Exchange, Los Angeles, which last year offered a box of Sun-kist oranges, delivered anywhere in the United States, at \$7, transportation included. Orders began coming in October, were heavy from Europe, eventually ran up to around 15,000, or 32 carloads. Sun-kist oranges were the only food offered, apart from candy.

Sunkist sells only to the wholesale trade, and for this special deal, not open to other consumers, bought oranges from its cooperative packing houses in California, spotted carloads at 25 central points in the United States, and sent address labels to the Railway Express Agency at those points. Railway Express forwarded the fruit, took a load off labor-short wholesalers.

The flat price of \$7 was approved

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*"But you've got to get here tomorrow!"*



"I'm trying, hon!"

"Been right on schedule—all the way from New Guinea. But now—I'm stuck."

"The only train home until morning is the All-Pullman Limited. And it's sold out. So is the plane."

"But listen, hon. There's still a chance that the railroad and

Pullman people will get me on that train.

"I told them why it's important and they've practically tied themselves in knots trying to help. That's why I'm

sweating it out right here in the railroad station—while they watch for a last-minute cancellation . . ."

**Will He Get to His Own Wedding?**

THAT DEPENDS ON whether someone realizes this:

*Half the Pullman fleet of sleeping cars is still in troop service. The other half is carrying more passengers than the whole fleet carried in peacetime. Prompt cancellation of unwanted space is necessary to prevent wasting accommodations that people need.*

So please—when your plans change—cancel well in advance of train departure and make the Pullman bed reserved for you available to someone else—possibly a serviceman.

★ KEEP ON BUYING WAR BONDS—KEEP ON KEEPING THEM! ★

## PULLMAN

For more than 80 years, the greatest name in passenger transportation

● Busy with its war job, now—but looking forward to the day when new-type Pullman cars go into service. In one of

them—the Duplex-Roomettecar—you'll have a private room for little, if any, more than a lower berth costs now!

© 1945, THE PULLMAN COMPANY

*This announcement is neither an offer to sell nor a solicitation of any offer to buy securities. The offering is made only by the Prospectus.*

**NEW ISSUE**

# The May Department Stores Company

150,000 Shares \$3.75 Cumulative Preferred Stock  
(Without Par Value)

**Price \$103.50 Per Share**  
plus accrued dividends

*A copy of the Prospectus may be obtained within any State from such of the Underwriters named below and from such of the other Underwriters as may regularly distribute the Prospectus within such State.*

Goldman, Sachs & Co.

Lehman Brothers

Blyth & Co., Inc.

The First Boston Corporation

Harriman Ripley & Co.  
Incorporated

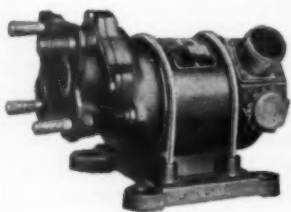
Kidder, Peabody & Co.

Mellon Securities Corporation

Smith, Barney & Co.

April 10, 1945.

## DEVELOPING A New Product WHICH REQUIRES A MOTOR?



★ You may find that the following procedure will prove helpful in solving your motor problem.

**FIRST**, select the motor manufacturer best qualified to work with you, both from the standpoint of engineering background and experience in building special application, fractional horsepower motors.

**SECOND**, call in this manufacturer when your product is in the early stages of development.

**THIRD**, take full advantage of his valuable experience by having his engineering department work in conjunction with yours, or place your motor problem entirely in his hands.

**THE LAMB ELECTRIC COMPANY • Kent, Ohio**

*Lamb Electric*  
*Black & Decker Electric*  
FORMERLY

SPECIAL APPLICATION  
FRACTIONAL HORSEPOWER MOTORS



### SPEEDING BEAUTY

At Pierre Andre's beauty salon, Chicago, a new "spool wave" machine and dries hair simultaneously in only 20 min.—about half the time required by customary methods. Each curl wound on a perforated wooden spool through which warm compressed air passes. The Chicago firm, Instant Hair-Drying Method, Inc.—of which Andre and John Fluegel, the inventor, are principal stockholders—reports advance orders for 18,000 units at \$20 each. Scarcity of 1/2-hp. motors precludes quantity production, allows the manufacture of only three or four units a month as demonstrators.

by OPA. Profits (about \$9,000) went to the Army Exchange Service, which operates the post exchanges. Service people welcomed the idea of a Christmas package for the folks at home, and 500 postcards sent out, asking how the fruit arrived, brought 375 replies, mostly favorable.

### MAY RAISE LIQUOR TAX

The huge demand for retail liquor stores, which is resulting in turnover of boom proportions throughout the country (BW—Mar. 17'45, p48), is indicative of the widespread belief that liquor dealers are gathering in fancy profits.

In Atlanta the interest in whisky stores has taken a new turn. City councilmen, well aware of the booming



...or business, are considering raising the municipal license fee for liquor retailers from \$500 to \$1,000, as well as doubling the present \$1,000 tax on wholesalers and \$2,000 levy on manufacturers.

The council also may increase from 100 (maximum set in 1938) to 200 the number of retail liquor stores allowed within the city.

Atlanta liquor interests, fighting the proposed tax increase, are raising the cry of discrimination, claiming that the city is planning to add to their burden at a time when taxes on other merchandise are being lowered. Atlanta reduced the license fees on chain grocery stores and meat markets last fall (BW-Oct. 44,p95).

## COMPROMISE MILK LAW

A contest between organized and independent dairymen in Oregon has ended in a draw with passage of a compromise state pasteurization law.

Legislative agitation began last winter after Portland reported more than 50 cases of undulant fever, an illness accessible to bacteria in raw milk and dairy products from cows infected with Bang's disease. Large co-ops and dairymen's associations sided with health authorities who demanded statewide compulsory pasteurization.

Small producers of raw milk, owners of 30 or fewer cows, contended that such legislation would force them to market through the large outfits. Adequate machinery for a 30-cow dairy would cost something like \$2,800, if it were available.

Under the law evolved to compromise the two viewpoints, county veterinarians must keep a close check on all herds. Dairies with healthy cows may market raw milk except in cities where ordinances forbid it. Cows which react positively to Bang's tests must be removed from herds. If the disease still spreads, all milk from the herd must be pasteurized until the herd is free of the bacteria. The old law called for herd inspection only once a year.

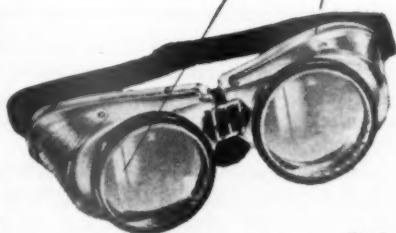
## "NAME" BRANDS BOOSTED

Chains may give the big play to their private brands (BW-Mar.31'45,p80), but independent grocers, as might be expected, are planning to give nationally advertised brands preference in the post-war period. This is indicated by the first of four quarterly surveys made jointly by the National Assn. of Retail Grocers and the Saturday Evening Post.

Sixty-two percent of the 1,365 independent grocers covered in the survey plan to stock a larger number of advertised products, 36.3% do not, and 1.7%



for eye injuries...



Perhaps your plant has never had to pay a four-figure claim for an eye accident. Yet—unless you already have an adequate eye protection program — eye accidents are, without doubt, adding materially to your production costs. How much? Well—if your experience is average—better than \$5 per shop worker per year.\* Why let these unnecessarily excessive costs continue, when you can equip your workers with AO Safety Goggles—proved positive protection—for about \$1.50 a pair?

An AO Safety Representative will be glad to consult with your Safety Director, and help work out a sound program for lower costs through safer methods. Write nearest AO Branch Office, or direct to American Optical Company, Southbridge, Massachusetts.

\*Estimated by the Society for the Prevention of Blindness.

American  Optical  
COMPANY  
SOUTHBRIDGE, MASSACHUSETTS

## Strengthen your ability to direct and handle conferences

with these straight-forward procedures for the business, training, and formal conference

So that you can make sure of directing day-to-day business, training or formal conferences to get desired end results, learn these tested methods of handling all types of people, get these sound pointers on asking leading questions and keeping to the main discussion points, use these step-by-step procedures to make every conference hit the right mark.



Just Published!

## CONFERENCE LEADERSHIP in BUSINESS and INDUSTRY

By Earle S. Hannaford

Supervisor of Training Practices, Long Lines Plant Department, American Telephone and Telegraph Company

McGRAW-HILL INDUSTRIAL ORGANIZATION AND MANAGEMENT SERIES

289 pages, 5 1/4 x 8 1/4, 31 illustrations, \$3.00

This book presents a general conference process, and from this develops and describes three specific conference procedures which make it possible to adjust leadership methods to various types of meetings. The author analyzes those aspects of handling people which relate conference leadership to leadership in general; basic types of questions and their use in conference leadership; frustration and inferiority, their manifestations and control; competitive element as a factor in conference participation; desirable traits of a conference leader interpreted and measured in terms of performance rather than personality.

### LOOK UP:

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## PRODUCTION HEAT FOR ELECTRIC PADS

Against a backdrop of Connecticut fishing boats, Casco Products Corp. has started production in Saugatuck, a noncritical labor area, of 500,000 electric heating pads, the first since Pearl Harbor. Currently turning out fuses for artillery and aerial bombs, Casco farms out its pad quota, under WPB's special authorization, among nine small subassembly plants to spare its own critical needed workers at Bridgeport. First of the pads, made in large part by neighborhood women, will go to sick in hospitals and homes holding physician certificates. Price will be \$4.50 and up, 15% to 20% higher than before the war. When this program is completed, Casco hopes to get a go-ahead on more

are undecided. Asked if they planned to stock fewer private-label lines, 64.1% said yes, 34.5% said they would add more private labels, and 1.4% were undecided.

All grocers included in the survey are N.A.R.G. members; 92.9% of them operate only one store.

Classified by buying methods, 27.9% belong to a national or local voluntary merchandising group, 30.9% belong to a co-operative buying group, the remainder has the conventional buying arrangements with jobbers and manufacturers.

The present study sheds some light on the extent to which nongrocery items are now sold in grocery stores. Of the stores surveyed, cigarettes are sold in 85.6%; cigars, 75.7%; tobacco, 85.8%; razor blades, 81.5%; patent medicines, 42.6%; packaged vitamins, 41%; tooth paste, 65.1%; tooth brushes, 52.5%; shaving cream, 60.1%; face creams and powders, 38.8%; magazines, 10%.

## OPA EASES ADJUSTMENTS

As costs press harder against price ceilings in the next few months, OPA expects to grant an increasing number of individual price adjustments to companies that are able to prove special hardship.

The trend is particularly noticeable in the food price field. As an example, OPA has just liberalized the procedure under which processors of prepared flour mixes can apply for increases in the ceiling prices. Previously, OPA has ruled that no processor of flour mixes could receive a price boost so long as his over-all earnings were at previous (1936-39) levels or better. This requirement has been eliminated.

If a processor shows a profit in his flour mix department, he can receive a price boost on an individual line to cover direct costs plus factory overhead. If flour mixes are being sold at a loss, he can get an increase to cover total costs. No increase will be allowed, however, where this would result in a higher ceiling price than that prevailing among competitors for the same kind of flour mix.

As hardship cases multiply, OPA adjustment procedures tend to become increasingly liberal. In many fields, adjustment procedures originally specified that a manufacturer's entire operation had to be in the red before he could seek a price increase. Hardship adjustments still vary from industry to industry—with the rules for some industries much tougher than for others—but OPA is moving toward a formula which can be applied generally.

# THE WAR AND BUSINESS ABROAD

BUSINESS WEEK  
APRIL 14, 1945



The war has reached the stage where, in every country, mounting diplomatic battles—both domestic and international—will vie for the headlines with military and naval developments on the European or Far Eastern fronts.

The San Francisco Conference on International Organization can be accepted as a pace-setter for a whole series of negotiations which will continue almost steadily until the end of the war with Japan.

Optimistic estimates are that the conference will complete its business in five weeks; gloomy conservatives declare it will last three months.

But even the most pessimistic insist that, despite the bitter controversies which inevitably will arise, **the conference will succeed in setting up some kind of international security organization.**

Overlapping the San Francisco negotiations, and perhaps influencing them, will be the congressional battle over extension and amendment of the important Trade Agreements Act, due to expire June 12.

The bill for extension includes an amendment which would allow the President to cut tariff rates 75% below Smoot-Hawley rates (instead of the mere 50% granted in the original act).

**You can anticipate shrewd maneuvering by the Administration to win congressional support of the plan, for without it Washington is almost helpless to bargain for bigger export outlets to absorb this country's war-expanded manufacturing capacity (page 120).**

Also, acceptance of the Bretton Woods plan and enlargement of the lending capacity of the Export-Import Bank will be pushed by Washington whenever this country seems to be in danger of being outmaneuvered in the long series of international negotiations soon to be under way.

Fearing that the San Francisco meeting may run well into the summer, **Washington has definitely postponed the Inter-American Technical Economic Conference from June 15 to Nov. 15 (BW—Mar.3'45,p112).**

By that time, Washington expects to be in a stronger bargaining position because it will know how far it can go in offering tariff bargains, immediate credits, and prompt deliveries.

**Incidentally, don't be surprised if Washington announces the creation of a government-business Board of Trade some time this summer.**

Strongly favored by William L. Clayton, assistant secretary, this agency is bound to be under State Dept. control and aimed primarily at providing a channel for trade and trade promotion between this country and states with centralized trade monopolies, such as Russia.

Created this year, it would also be ready for use temporarily in any areas which insist on controlled foreign trade during the period that wartime restrictions are being removed.

**You can look for a wave of peace rumors from the Pacific, but don't expect Japan to surrender immediately or suddenly.**

Tokyo's reported peace proposals so far are based on withdrawal from southeastern Asia (where Nipponese troops are already helplessly stranded) and from southern China (where Japanese forces can soon be cut off from supply bases).

But these proposals provide for Japanese retention of Manchukuo



# THE WAR AND BUSINESS ABROAD (Continued)

**BUSINESS WEEK**  
**APRIL 14, 1945**

(which neither Russia nor the U. S. will tolerate) and of Formosa (likely to conflict with U. S. naval plans for control of the Pacific).

The Big Three—Britain, Russia, and the U. S.—are committed to unconditional surrender by the Japanese.

**Surrender of Manchukuo**—in which Japan has enormous investments and to which surplus population must migrate if Nippon is to maintain its present standard of living—is **something no Japanese government can underwrite until conditions are made far more unbearable by Allied bombing and naval blockade.**

While it is censorable to speculate in print on Soviet moves in the Far East following the warning to Tokyo that the nonaggression agreement will not be renewed, it is possible to warn that **there are good reasons for believing that Japan will not try to beat Russia to the offensive.**

Nippon's home industries are already exposed to terrific poundings from U. S. planes based on islands terrifyingly close to the homeland.

An attack on Russia would inevitably precipitate similar pounding of the auxiliary munitions plant in Manchukuo from Russian bases no farther away.

Also, Russia is credited with having had more than 130 submarines in the Pacific at the outbreak of the war. These would automatically threaten Japan's last tenuous ties with the mainland—now desperately maintained for their food as well as their industrial raw materials supplies.

**Brazil is taking drastic measures to improve its competitive position in world export markets.**

A decree has been issued demanding that, henceforth, textiles be exported from Brazil only by manufacturers registered with the Textile Executive Committee.

Object is to eliminate unscrupulous exporters who have not maintained standards of quality, who have charged exorbitant prices without setting aside profits to reequip mills with modern machinery after the war, and who have not lived up to contract delivery terms.

Many of Brazil's cotton mills have been making profits of 100% to 300% during the war. On the other hand, barely 1% of the country's installed looms are automatic.

Incidentally, Brazilian natural silk has run into difficulty in world markets.

A large shipment of silk stockings from Sao Paulo which it has been impossible to sell in Canada because of the Dominion's price-control law was raffled at a war charities bazaar in Ottawa this week.

**In New York, despite similar price problems, the Brazilian Government Trade Bureau showed a wide range of silk stockings, yarn, and fabrics.**

Yard silk from Brazil has been sold in department stores regularly but in small quantity throughout the war.

At \$9 a lb., however, silk for stockings costs more than twice prewar Japanese silk prices, which the Office of Price Administration uses as a basis for setting silk hosiery ceilings.

Still undaunted by the possible return of low-cost Far Eastern silk, Brazil has boosted silk production from 90 tons in 1942, to an estimated 500 tons for 1945 (compared with annual prewar imports into the U. S. of about 25,000 tons).

## BUSINESS ABROAD

### Aid for U. S. Trade

British devise a system of regional American outlets (the Hambro plan) in effort to gain markets they will need so badly.

If Britain is to escape a drastic postwar cut in its imports—and consequently its standard of living—exports must be hoisted 50% above the 1938 level. There is no other logical way of correcting the dislocation of the country's balance of payments resulting from liquidation of foreign assets and loss of shipping during the war.

**Looking at the Dollar**—And when Britain talks of expanding exports, its wanderers irresistibly to the American market and dollar-fat pocketbooks for the dollar is likely to be the scarcest—as well as the most valued—currency in postwar trade. At the same time, Britain has launched upon a campaign of self-criticism in order to blast any lingering complacency which derives from its centuries-old reputation as the world's greatest trading nation.

As long ago as 1929, the Balfour report whiplashed British producers and exporters for neglecting scientific market studies, and for old-fashioned distribution techniques. In 1943, the British Empire Chamber of Commerce in the United States endorsed a criticism that appeared in the Times (London), and threw it at British exporters: "It is high time that England planned to export what the rest of the world wants to buy, rather than those products which the British enjoy making."

**How Get the 50%?**—And for some time, hard-bitten Britons have been knocking down to this specific problem: how to assure the necessary 50% rise in exports.

Concrete results are beginning to emerge. Only a fortnight ago, the British Export Trade Research Organization—backed initially by big firms capitalized at more than \$1,000,000,000—made its bow in Britain and invited participation of all interested British exporters. It will launch a high-speed comprehensive survey of world markets for British goods.

In the United States, meanwhile, equally astute Britons have designed a new streamlined regional marketing agency for selected British goods, opened one regional office, and laid plans for eight more to be ready for

action the moment war restrictions on shipping are eased.

• **Headed by a Banker**—The regional marketing setup is being introduced by R. Olaf Hambro, present head of Hambro's Bank Ltd., an old British banking firm with a solid reputation in the field of export financing. Chief leg-man in the setting up of regional offices is W. Owen Slater.

The Hambro plan made its debut in Dallas, outlet No. 1 of three planned to serve the south-central distributing area. The complete plan includes the following areas and city outlets:

New England: Boston.  
Northeast: New York, Philadelphia.  
Southeast: Atlanta.  
N. E. Central: Chicago, Detroit, Cleveland.  
North Central: Minneapolis.  
Central: St. Louis, Kansas City.  
South Central: Dallas, New Orleans, Houston.  
Northwest: Seattle.  
Southwest: San Francisco, Los Angeles.

• **The Dallas Setup**—In Dallas the established wholesale house of S. H. Lynch & Co., Inc., handles what merchandise British producers can get

across the Atlantic today (chiefly chinaware). The firm has a large downtown building with imposing display space for its line of British goods which will, of course, expand rapidly when wartime controls are lifted.

The Hambro objective is to get away from hit-or-miss selling to the American market through come-and-get-it agents in New York. By the time the war ends, several of the regional distributors may be ready for business (the Chicago setup is now being worked on).

Hambro's British customers are mainly small producers who never have had American agents or sales offices. On-the-spot study (plus quick criticism of items not suited to the market) should enable Hambro agents to build substantial business dovetailed to each area's needs and potential.

### Rail Aid to Mexico

Blueprint for rehabilitation is provided by U. S. technicians in return for a good neighbor's cooperation in the war effort.

MEXICO, D. F.—The almost certain sequel to the extravagance of the railway-building era has been retrenchment and neglect of right-of-way and equipment in frantic efforts to keep deficits down.

The history of Mexican railways fits this pattern neatly.

At the start of this war 75% of Mexican locomotives were over 25 years old; some of them were long-funneled sexagenarians. It is estimated that a third of the 30,000,000 cross-ties are defective. Most of the rails are of the old-fashioned 80-lb. variety.

• **Maintenance Expenditures**—In the bustling days of the mid-twenties maintenance expenditures ran annually to 23,000,000 pesos. In 1942, with ton-mileage nearly doubled, repair costs were held under 25,000,000 pesos—and washouts, split-rails, and wrecks multiplied accordingly.

Partly in the interests of neighborliness, but chiefly to speed wartime freight from Mexican mines to U. S. mills, Washington dispatched a Technical Railway Mission to Mexico early in the war. Its team of crack railroaders headed by Oliver M. Stevens (whose lieutenant, Elliot P. Vandercook, has succeeded him) examined every coupling and petcock, office-form and rate card, from the Rio Grande to the Guatemala border. The mission's monumental report and recommendations will keep Mexican railroad administrators busy for decades to come. An early guess calls

### British Hunt Markets

Girding for what might become a postwar trade battle—in the absence of international efforts to boost world commerce by eliminating discriminatory barriers—big business in Britain has formed the British Export Trade Research Organization.

Backed by nearly a score of companies with combined capitalization of a billion dollars, B.E.T.R.O. has invited all British exporters, large and small, to join. Top companies behind the agency include Lever Bros., General Electric Co., Ltd., International Chemical Industries, and Dunlop Rubber Co., Ltd.

Although B.E.T.R.O. is a private agency, it has the nod from government and will work closely with the Dept. of Overseas Trade in its search for markets. With the future prosperity of the United Kingdom dependent upon replacing war-consumed income-producing investments and shipping with higher—perhaps 50% higher—exports, the new agency will conduct market surveys in all countries. It will be prepared to dispatch research missions to any vital market to study trading prospects.

for \$54,000,000 expenditures to modernize the Mexican rail system.

• **Near-Miracles Wrought**—Even during the war, the U. S. mission accomplished near-miracles: reconditioning foundries, stepping up repair speeds and cutting costs, introducing scrap reclamation programs, and bringing new techniques, materials, and equipment to the Mexican railroader.

During the war, 50,000 Mexicans have worked on U. S. railroads—chiefly as trackwalkers. Thousands have received in-shop training besides, and the mission has set out a program for giving at least 5,000 Mexican workers advanced training in operating techniques.

These have been emergency accomplishments and tactics, but long-range advice to the Mexican government blueprints methods of making Mexico's complicated and now-dilapidated system one of the best in the world. But it will take a lot of doing.

• **Among the Handicaps**—A leading Mexican handicap, soft-pedaled at times, is corruption which affects management and crops out even among track workers—ranging from crooked bookkeeping to theft and sale of spikes and frogs. But simple lack of knowledge of modern railroading is of equal importance. To help correct this, a small technical staff may work for years

hammering American efficiency into Mexican railroading during the period of its mechanical rehabilitation.

Certainly the incentive to efficiency is low when any 1,000-mi. trip means a half-dozen breakdowns.

Rehabilitation of existing trackage will be undertaken at the same time critical links are completed in the national system (map) and while new locomotives and other rolling stock are imported. The lines need hundreds of new powerful locomotives and thousands of cars.

• **Waiting in Line**—Like other Mexican development programs—power, irrigation, agriculture, and industry—the rail

## MEXICAN RAIL LINES MODERNIZE FOR PEACE

Reorganization, new construction, new equipment will rehabilitate antiquated transport system.



In the history of Mexico's railways lies an important clue to the complexity of the \$50,000,000 rehabilitation job now being undertaken along plans laid out by a U. S. railway mission (BW—Sep. 30'44,p113).

Thirty-five years ago Mexican lines were unified by President Diaz, but during the ensuing decade of civil wars they all but disintegrated. In 1930 a semiofficial agency took over, and in 1937 President Cardenas put administration in the hands of the railroad workers union. In 1940 the government took over again, reducing union authority. The map shows:

(1) Important links in the railway connecting California with northwestern Mexico, and at the other extreme, connecting the national lines with the Yucatan network in the southeast, are being built by the Ministry of Communications.

(2) The Southern Pacific R.R. of Mexico, a subsidiary of the U. S. line, has been improved to expedite wartime shipments of copper, molybdenum, lead, and antimony to the U. S. The line operates under a special concession and rents rolling stock from the parent company.

(3) Mexico Northwestern R.R. was acquired by Mexico in 1940 and will be modernized to tap rich timber.

(4) The Kansas City, Mexico & Orient R.R. was an American-inspired and financed project to funnel traffic on a short route to a Pacific port. The government, which acquired the line in 1940, now intends, with the aid of a U. S. Export-Import Bank loan of \$10,000,000, to close the yawning 200-mi. gap left when investors deserted the line.

(5) The chief lines linking industrial central Mexico with the U. S.,

Gulf and Pacific ports, and Guatemala—totaling 8,500 mi. of track—are a part of the National Railways. Many small lines have been amalgamated into this system.

(6) Two British-owned lines, one managed by the National Railways, connect Mexico City with the important port of Veracruz (Ferrocaril Mexicano and Ferrocarril Interoceanico). President Avila Camacho and the general manager of Mexicano, Col. J. D. W. Holmes, have been dickering over a sales price (\$16,000,000 asked; \$6,000,000 bid). Mexicano is partly electrified, a first-rate line. The Interoceanico is a narrow-gauge jerk-water line which has cost the National Railways \$2,000,000 a year since it was taken over. The sales price, not yet ratified, was set at \$3,051,000, and that sum was deposited in London last summer.



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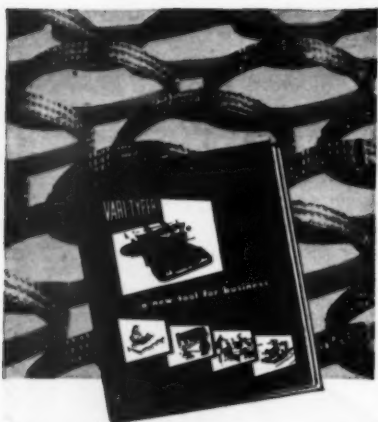
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road modernization will not be completed overnight or next year. Mexico is only one of many nations waiting in line for new transportation equipment (BW-Sep.30'44,p113). And spending may be held—for budgetary reasons—to around \$5,000,000 a year, part of which will be spent at home.

This year, while a Mexican commission studies new rail rates, all charges (except for minerals and metals) have been hiked 20% to 25% to anticipate some costs of the proposed program.

New construction envisaged is carefully tied to the other development projects. The new lines in the northwest will tap timber, mineral, and new agricultural resources. And for the first time Mexico City will have rail connection to the southeast with Yucatan—rich source of chicle and other prized products.

• **Diplomatic Dividend**—The work of U. S. technicians in Mexico can be cited as a dividend for good neighborliness, for Mexico has bent every effort to help the U. S. war effort (even at the cost of considerable criticism on the home front). Similar, but smaller U. S. railroad missions have done emergency advisory jobs during the war in Colombia, Bolivia, and Ecuador, and U. S. help has hastened Brazilian railbuilding along the Atlantic bulge.

The Mexican experiment can be pointed to by State Dept. diplomats as an almost perfect example of how the export of American know-how at small cost (the mission has not yet used its \$8,000,000 budget) can pay off in sizable exports of manufactures and thus pay dividends in both cash and kudos.

## CANADA

### Alberta Has a List

Items needed after the war tabulated in first large-scale provincial survey of Canadian purchasing program.

OTTAWA—According to a recent governmental survey of postwar spending plans, Alberta citizens have shopping lists which call for laying out a per capita average of \$800 over a two-year period to satisfy war-postponed needs.

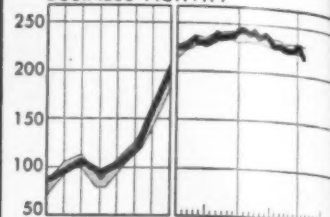
• **First Large Survey**—The survey was the first covering a large area to be completed in Canada, and its results are based on actual house-to-house, farm-to-farm, and shop-to-shop canvassing with local councils, boards of trade,

## TREND OF BUSINESS CANADA AND U.S.A.

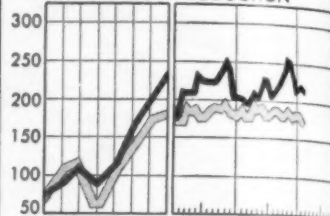
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CANADA — U.S.A.

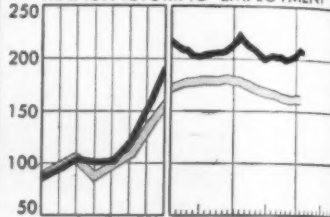
### BUSINESS ACTIVITY



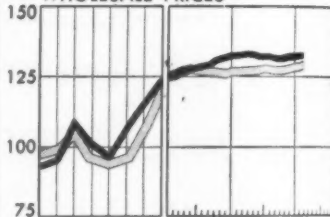
### STEEL INGOT PRODUCTION



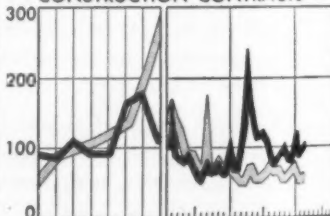
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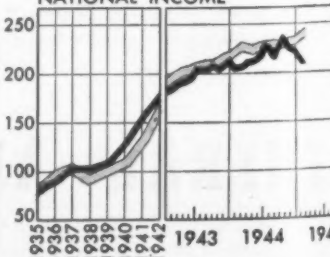
### WHOLESALE PRICES



### CONSTRUCTION CONTRACTS



### NATIONAL INCOME



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service clubs cooperating with the  
financial government.

Alberta has a varied economy based  
on coal mining, oil production, ranch-  
ing, wheat growing, and mixed farming.  
Probably has experienced a slightly  
war time boom than the rest of  
Canada.

Figures submitted to the Alberta  
Statistical Service last week show that planned  
household spending will run to \$690,000,-  
for the 800,000 people in the prov-

Data on resources to finance the pur-  
chases show that citizens hold about  
\$10,000,000 in war bonds, and, if  
savings parallel those in other parts  
of Canada, Alberta residents also have  
about \$200,000,000 in savings deposits.  
They are prepared to finance one-  
third of the total buying program with-  
out outside loans.

**Farm Outlays Lead**—Farm machinery,  
trucks, automobiles, and house furnish-  
ings rank high among the items to be  
purchased. Farmers plan to expend  
\$5,600,000 of the total, city house-  
holders \$234,000,000, and service and  
other businesses \$31,000,000.

Close to one-third of the families  
in the province plan to build or buy  
new homes. If they all get what they want,  
city dwellers will put up \$25,000,000  
in homes purchased, and \$81,000,000  
in new construction. Farmers will  
spend \$88,000,000 for new houses and  
\$8,000,000 on other farm buildings.

Heavy machinery that farmers have  
been unable to buy in wartime will call  
for \$7,000,000 out of farmers' savings,  
much of this business will go to  
the U.S.

**Millions for Furnishings**—Slightly  
more than 30% of urban residents want  
to buy new refrigerators at an estimated  
cost of \$7,500,000, and about the same  
proportion want radios costing \$3,700,-  
000. Many other household items—  
vacuum cleaners, stoves, and  
washing machines—that have worn out  
during the war are listed as needed.  
New living room furnishings will require  
\$1,000,000 out of total anticipated fur-  
niture spending of \$20,000,000. Piano  
buying will call for \$4,000,000. Farm  
city families will spend \$40,000,000  
on new passenger autos.

It is believed that about half of those  
planning to build or buy houses will  
require credit, and about 23% of those  
planning purchases of hard goods plan  
to use instalment method of payment.  
Due to legislative restrictions, Alberta  
has not had the benefit of the national  
financing act, and despite a provincial  
guarantee, loan companies have shied  
away from business in the province.  
Steps are now being taken to assure  
operation of Canada's newly expanded  
financing act in the province.

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## THE MARKETS

(FINANCE SECTION—PAGE 8)

Despite an occasional appearance of short-lived but quite sharp price weakness, and the descent of trading volumes to discouragingly low levels, the stock market hasn't done at all badly since late last month. By the middle of this week, it could boast of having actually erased well over half the losses suffered in the decline that got under way soon after eight-year highs had been set in early March by both the rail and the industrial stock price averages.

• **Strong Price Uptrend**—This week, stocks as a whole have been disclosing the strongest price uptrend noticeable for some time. On both Tuesday and Wednesday, daily gains of \$1 to even well above \$2 were pretty generously sprinkled throughout the list.

Steel, automobile, and rubber stocks have been the particular targets of buyers this week, because of hopes that those industries will benefit from early reconversion developments. The rails, however, have likewise been active and strong—especially the shares of those western roads which will have to carry the bulk of the expected extra traffic to the Pacific Coast after Germany has been defeated.

• **Volumes Expand, But**—Trading volumes this week, for a change, have been disclosing expansion, and on Wednesday finally crossed the 1,000,000-share level. However, despite the rise in activity, the scale of turnover still appears to many market seers to reflect considerable investor uncertainty over reconversion and other economic problems which are expected to arise once hostilities end in Europe.

Most Wall Streeters, as a result, thus far haven't allowed themselves to be-

come too excited over the current rally. Many, in fact, wouldn't be surprised if much of the rise were attributable to a combination of short covering and technical markets. This group (probably representing the majority of current Wall Street opinion) still sees too many potentially unfavorable events clouding the near-term market outlook to warrant anything except caution in considering short-term operations.

• **Underwriters Busy**—Wall Street's underwriting houses this week have been busier with new issue offerings and Securities & Exchange Commission registrations than at any time since last October.

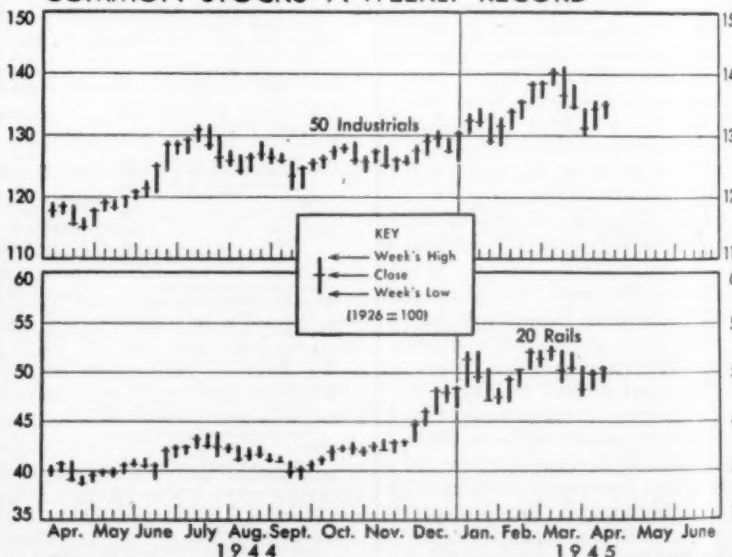
Through Wednesday the new offerings had included \$15,000,000 of Macy Department Stores \$3.75 preferred stock; \$7,000,000 of 21% mortgage bonds; 40,000 shares of common stock by Central Vermont Public Service Corp.; \$26,089,000 new Ohio Edison Co. 21% first mortgage issue, and \$10,000,000 Montana-Dakota Utilities bonds. Also scheduled for offering before the week was out were \$50,000,000 New York Power & Light Corp. 2½s and probably \$84,000,000 new Reading Co. bonds.

### Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
<b>Stocks</b>				
Industrial ...	135.0	134.4	136.5	118.5
Railroad ....	50.6	49.9	50.3	40.8
Utility .....	61.1	60.7	61.4	51.6
<b>Bonds</b>				
Industrial ...	123.4	123.2	122.7	120.0
Railroad ....	114.9	114.9	114.5	105.9
Utility .....	116.2	116.4	116.7	116.7

Data: Standard & Poor's Corp.

### COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

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## Items of Trade

There has been said and written about possibilities of expanding trade with Latin America after the war.

Recent figures indicate that the regions south of the Rio Grande have accumulated gold and credits valued at more than three billion dollars. Perhaps this is not readily convertible into dollars, but there is great interest in these nations in American-made machinery to accelerate the industrialization that has received great impetus as a result of increased demands

for machinery. However, many difficulties must be overcome, and uncertainties removed, if trade is to be expanded as substantially as we and our neighbors hope it will be. The foreign exchange now available is not likely to be spent readily on goods unless there are strong incentives that we shall make it possible for these nations to dispose of many of their products here.

Undoubtedly, our own tariff schedules have to be re-examined. But tariffs on the South American countries average higher than ours. And the tariff is one of several factors that go to make up a trade barrier. Some nations in the south of us maintain rigid exchange controls. Surtaxes, sales taxes, and inspection fees are costs doing business that must be ferreted out by each trader, because they vary from nation to nation, and from product to product.

\* \* \*

One of the difficulties of expanding trade with Latin America is our own inclination to consider an area of more than seven million square miles as a single unit. Actually, there are 20 nations each with different nationalistic traditions and aspirations. Differences in language, absence of adequate transportation, great tropical regions, and the Andes, all serve to restrict the development of a continental unity and the growth of a common culture.

In spite of the handicaps, it appears almost certain that Latin America is destined to enjoy a higher purchasing power than before the war. And those nations interested in the development and expansion of local industries undoubtedly will look first to the United States for tools and counsel, because no nation will be in a position to supply rapid delivery.

Industrialization is impossible without technical knowledge, in varying de-

grees, at all levels from the humblest worker tending a machine to top management. In the past virtually all of the technical information available in Spanish and Portuguese has been translated from British and German reference works. As a result, European authors of technical works have acquired scientific prestige in Latin America and industrialists and engineers of that area have found it easier to adopt European operational procedure, as explained in these works, than to explore methods in use in this country.

\* \* \*

The North American supplier of industrial machinery who contemplates the postwar Latin-American market will not have to deal with this old problem. Already much progress has been made toward wide dissemination of technical information based on methods and equipment in daily use in this country.

Over the last two years, the McGraw-Hill Book Co. has signed contracts for translation of 30 of its industrial, scientific, and business volumes into Spanish, while 17 are being made available in Portuguese. A booklet of tables permitting easy conversion of weights and measures commonly used here to the metric system, universally used in Latin America, already has gone into a second printing. A technical dictionary, providing translations between English and Spanish of more than 500,000 terms used in business and industry, has been widely commended by translators, exporters, and government officials who long have recognized need for a work of this type.

This new effort to spread our technical information in Latin America comes at a time when the war record of the U. S. in industrial production gives adequate proof of the efficiency of the machines and methods that we use.

Greater familiarity with our procedures, through expanding use of these new translations of texts and reference works, inevitably will lead to greater respect for North American technical opinion by South American industrialists and engineers.

An important byproduct of this recognition of the excellence of our methods should be an increased demand by Latin America for the machines that make these methods efficient and profitable, provided, of course, that all those who expect to share in the postwar opportunities in the nations to the south are aware of the special problems that will confront them.

W.C.

## PLAIN TALK ABOUT PLASTICS

### Too Many Plastics?



Some people say there are too many plastics, too many jaw-breaking plastics names . . . too much confusion.

We admit it would be simpler for all concerned if there were only one plastic, that would do everything. But that millennium has yet to come.

Meanwhile there are many plastics, approximately 20 major types with scores, often hundreds, of different formulations of each to meet vastly different requirements. In this circumstance, Monsanto occupies a uniquely helpful position with perhaps the broadest and most versatile group of plastics in the industry . . . "Not every kind of plastic, but a plastic for every need."



For example, there's a Monsanto plastic that will meet unflinchingly the unusually severe requirements of electronic frequencies (Styramic HT), another the high styling demands of costume jewelry (Lustron), another (Resimene) that meets the critical non-arcing requirements of aircraft insulation, still another that met the Navy's need for shatterless glazing (Reinforced Vuelite) . . .

Actually it isn't as difficult as it may sound to put your finger on the proper plastic for a given application. If you make sure your sources of information are expert, broad and unbiased, Monsanto would be pleased to add your name to its plastics mailing list, if you would like to keep up-to-date on the important developments in this large and growing family of Monsanto plastics. Simply address: MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts.



# THE TREND

## RECIPROCAL TRADE: A KEY DECISION

One criticism of the Bretton Woods plan for a World Bank for Reconstruction & Development and a related International Stabilization Fund is that it puts the cart before the horse: It attempts to stabilize world monetary conditions before basic plans have been devised to keep world trade flowing in volume and held in some kind of balance for each major country.

And the weakness of the security plans that will be drawn at San Francisco is that they will be meaningless unless followed immediately by a series of economic pacts bold and broad enough to keep world business well above depression levels.

• **Washington is acutely aware of this problem.** Secretary of State Edward R. Stettinius has announced that "We shall do all in our power" to convene a meeting of the principal trading nations within the next year to consider problems of commerce.

Conferences of 20 to 50 nations are being staged so frequently these days, and to discuss such a vast range of problems, that it is becoming increasingly difficult to place them in their proper perspective and to understand their interrelationships. And yet, intelligent reactions to individual issues are impossible without this understanding of their relation to an over-all postwar program.

The Doughton bill, currently before Congress, presents just such an issue, for it will significantly determine this country's postwar economic policy and the strength of its bargaining power in the important international negotiations which will continue, now, almost without interruption until long after the end of the war in the Pacific.

Specifically, the Doughton bill proposes two things:

(1) That the Trade Agreements Act (popularly known as the Hull Reciprocal Trade Program) be extended for three years.

(2) That the power to reduce tariffs be adjusted again to allow cuts of as much as 50% in existing tariffs.

The objective of the proposed legislation is simple.

Extension of the act for three years beyond its expiration date on June 12 is asked as one means of assuring a skeptical world that this country—now the world's most powerful political and economic unit—will take its full share of responsibility in avoiding a postwar trade conflict and in helping to rebuild world commerce.

The request for additional tariff reducing authority needs to be clearly explained for, once understood, its objectives are plain.

• **The Trade Agreements Act was first passed in 1934**, more than a year after the Nazis, under Hitler, had started their drive to reduce all world trade to a strict

barter basis, and when Britain was combating depression with the restrictive Empire trade scheme. It was demanded by Cordell Hull to prove to a doubting and nervous world that this country was willing to make binding agreements to lower or freeze tariffs for a fixed period of time with any country willing to bargain along the same lines. It was renewed in 1937, 1940, and (for only two years) in 1943.

• **The original act provided the authority to cut existing tariffs as much as 50%.** In the eleven years since the act has been in effect, reciprocal trade agreements have been concluded with 27 countries. And, out of the tariff schedules including more than 3,000 items, reductions have been made on 1,226. On about 500 of these the full 50% cut originally allowed has been taken. An average cut on the entire list of 1,226 items, however, is about 30%.

Demand in the new bill is that a fresh 50% tariff cut be allowed, not on the 1934 basic rates, but on rates in operation on Jan. 1, 1945.

This means that on any item on which the original 50% reduction had been taken prior to Jan. 1, another 50% cut would be allowed—bringing the total slash since 1934 to 75%. But this could come on only the 500 items on which the full original cut had been taken. Items on which no tariff reduction had been made up to Jan. 1, 1945, would be subject to a cut now of only 50%, exactly the same amount that has been possible during the last eleven years.

In asking for the new authority Washington obviously is seeking fresh bargaining power for forthcoming trade conferences with the Latin-American republics at Washington in November (page 112), and with the world at the meeting which Secretary Stettinius has said he plans to call within a year.

In its way, then, what happens to the Trade Agreements Act in Congress between now and June 12 is more important than Bretton Woods, Mexico City, or San Francisco, for mainly on this country's foreign trade policy rests the success or failure of any world plan to avoid the issues—both economic and political—that poison international relations.

• **This broad concept of the immediate issue and of the heavy responsibility needs to be understood by Congress**—which must soon act on the legislation—and by business—which, more than ever, must shape its future policies against the vast background of world affairs rather than in the limited perspective of an isolated home market.

The Editors of Business Week



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